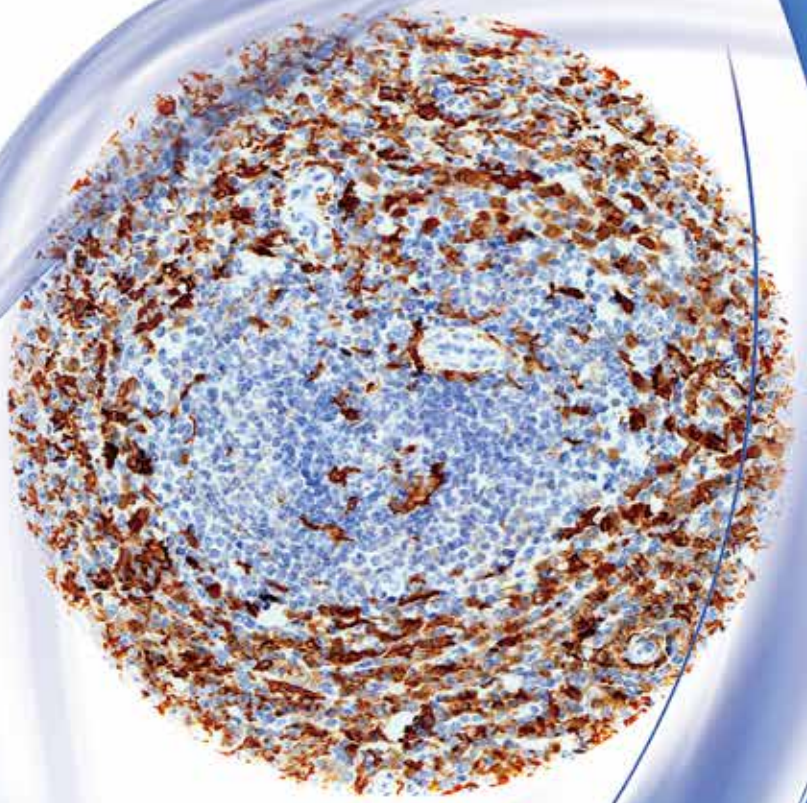
Gene Tech

基因科技（上海）股份有限公司

Gene Tech (Shanghai) Company Limited *A Gene Group Company*

Antibody Product Catalog

More than 500 primary antibody products have obtained NMPA certification, and more new antibodies continue to be launched



Gene Tech

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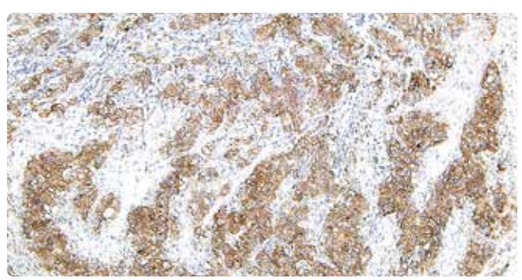
Table of Contents

AACT

IVD

- HIER
- Clone GR304
- Cytoplasm
- Cat.No. GT2062

AACT (α-1-Antichymotrypsin) is a serine protease inhibitor found in most histiocytes, macrophages, and normal gastrointestinal epithelial cells. This antibody can be used in combination with CD68 and Lysozyme for the diagnosis of eosinophilic granuloma and malignant fibrous histiocytoma. Differential diagnosis between granular cell tumor and cutaneous histiocytic reactive hyperplasia.

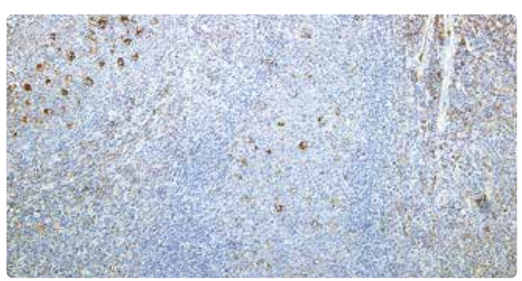


AAT

IVD

- /
- Clone poly
- Cytoplasm
- Cat.No. GT2061

AAT (α-1-Antitrypsin) is a kind of glycoprotein present in normal human serum with anti-proteolytic activity. It is mainly synthesized and secreted by hepatocytes and can be used to tag acinar cells, histiocytes and reticular histiocytes of pancreas and salivary glands. In clinical diagnosis, it can be used as a marker for malignant fibrous histiocytoma. The expression of AAT was positive in papillary thyroid carcinoma, but negative in normal thyroid tissue. AAT accumulation in hepatocytes occurs in inherited AAT deficiency.

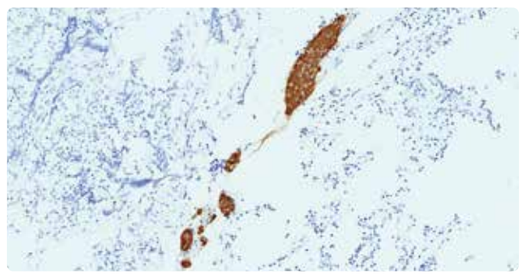


ACTH

IVD

- HIER
- Clone AH26
- Cytoplasm
- Cat.No. GT2127

Adrenocorticotropic hormone (ACTH) is a polypeptide hormone secreted by anterior pituitary cells. This antibody is mainly used in the functional classification of pituitary tumors. It helps to distinguish between primary and metastatic pituitary tumors; It can also be used to detect the distribution of hormone cells in some neuroendocrine tumors, such as pheochromocytoma and carcinoid tumors.

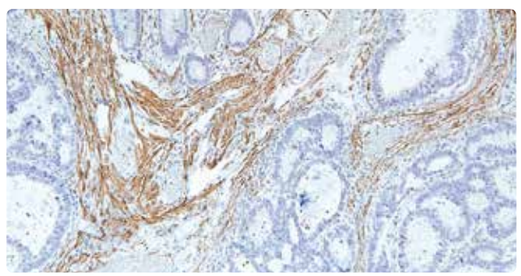


Actin

IVD

- /
- Clone HHF35
- Cytoplasm
- Cat.No. GM0635

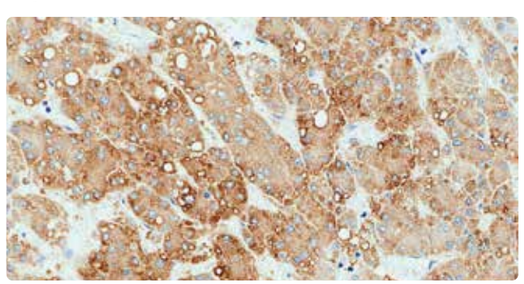
Actin is a ubiquitous, highly conserved cytoskeletal protein that is widely distributed in almost all myogenic cells. This antibody can react with the α-isoform of smooth muscle actin, and does not cross-react with skeletal muscle and cardiac muscle actin. It can label smooth muscle cells, including myoepithelial cells. It is used for the differential diagnosis of smooth muscle tumors and can also be used for the identification of myoepithelium of breast, salivary gland and sweat gland.



Adipophilin/ADRP

- HIER
- Clone B-6
- Membrane/cytoplasm
- Cat.No. GT2292

Adipose Differentiation Related Protein (ADRP), also known as lipophilin, is the main component of the surface material of the intracellular fat globules, which can display the lipid droplets contained in normal cells. Such as sebaceous gland cells, adipocytes, adrenal cortex cells, Sertoli/stromal cells, and mammary epithelium in the secretory phase. It can be used to assist in the diagnosis of sebaceous gland carcinoma. It has been found to be positive in 96% (45/47) of Burkitt lymphoma. Therefore, it can also be used for the diagnosis and differential diagnosis of Burkitt lymphoma.

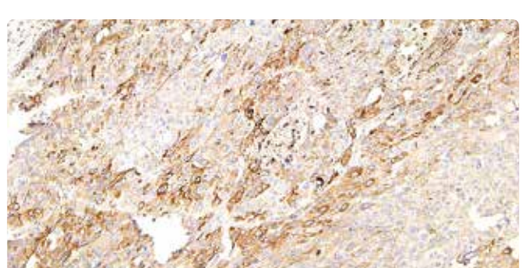


AFP

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GA0008

Alpha-Fetoprotein (AFP) is a glycoprotein synthesized by embryonic yolk sac cells, embryonic liver cells and fetal intestinal cells. Alpha-fetoprotein is normally expressed in fetal liver and yolk sac endoderm, but low or no expression is found in adult liver. The expression of alpha-fetoprotein is increased in hyperplastic hepatocytes, especially in some hepatocellular carcinomas and yolk sac malignancies. It has been reported that AFP staining in yolk sac tumors is limited with low sensitivity. In hepatocellular carcinoma, AFP has high specificity but low sensitivity.

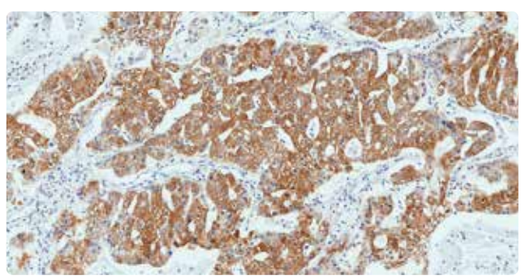


AKR1B10

IVD

- HIER
- Clone EPR14421
- Cytoplasm
- Cat.No. GT2563

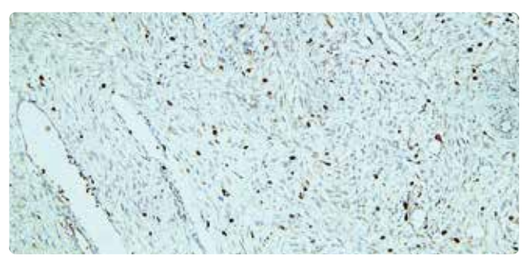
aldo-keto reductase 1B10 (AKR1B10), a member of aldo-keto reductase family 1, is responsible for reducing aldehyde-keto carbonyl compounds, promoting lipid synthesis, and regulating retinoic acid metabolism. AKR1B10 was first identified in hepatocellular carcinoma (HCC). In normal human tissues, AKR1B10 is mainly expressed in the gastrointestinal tract, and its expression is low or absent in other tissues. Studies have shown that AKR1B10 plays an important role in the occurrence and development of tumors. Akr1b10 is overexpressed in many epithelial tumors, such as breast cancer, cervical cancer, and lung cancer. Therefore, AKR1B10 may become a valuable molecular marker for tumor diagnosis and a new target for targeted therapy of tumors.



ALDH1A1

- HIER
- Clone 44
- Cytoplasm/nucleus
- Cat.No. GT2216

ALDH1A1 is a member of the ALDH enzyme family. The ALDH enzyme is distributed in the cytoplasm, mitochondria and nucleus. It is an evolutionarily conserved enzyme and contains 19 isoforms. ALDH1A1 is mainly expressed in the epithelium of testis, brain, eye, kidney, liver, nerve and hematopoietic stem cells. Recent studies have shown that ALDH1A1mRNA is abundantly expressed in solitary fibrous tumors (SFT) and hemangiopericytomas (HPC), as compared with meningiomas and synovial sarcomas. The combination of ALDH1A1 monoclonal antibody and CD34 antibody can be used to distinguish synovial sarcoma from SFT, HPC and meningiomas.

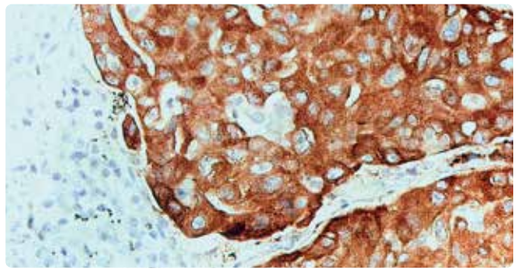


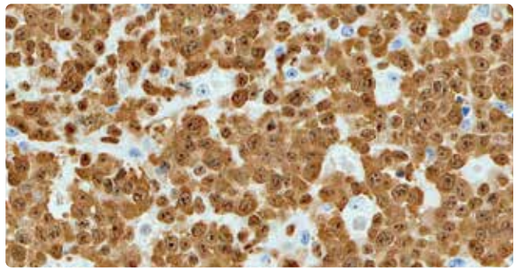
ALK

IVD

- HIER
- Clone 4A4/1H7
- Cytoplasm/nucleus
- Cat.No. GT2266/GT2311

Anaplastic lymphoma kinase (ALK) is a tyrosine kinase receptor protein. It is expressed at low levels in normal brain glial cells and neurons. It has been reported that ALK is expressed in anaplastic large cell lymphoma, inflammatory myofibroblastic tumor, rhabdomyosarcoma, leiomyoma and lung adenocarcinoma. ALK can be used for the differential diagnosis of anaplastic large cell lymphoma and Hodgkin's lymphoma. The prognosis of ALK-positive anaplastic large cell lymphoma is better.



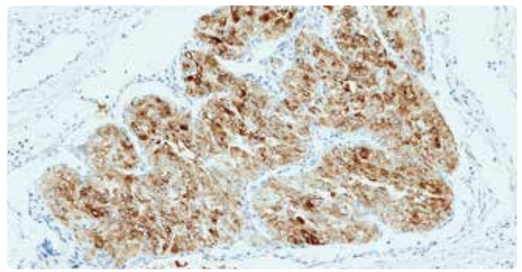


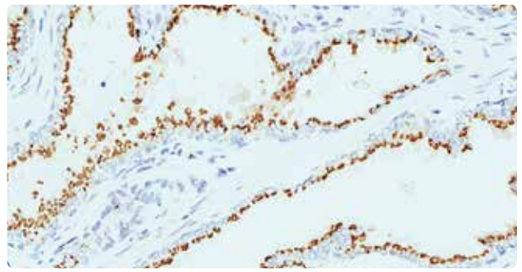
AMACR/p504s

IVD

- HIER
- Clone GM305/13H4
- Cytoplasm
- Cat.No. GT2453/GT2001

AMACR/P504S (α-Methylacyl-CoA racemase) is an important enzyme in fatty acid branched-chain β-oxidase. It is found in liver, kidney, pancreas and other tissues. AMACR/P504S is positively expressed in prostate cancer and high-grade intraepithelial neoplasia (HGPIN). It is often used in combination with antibodies such as CK5&6, p63 and PSA for the study of prostate cancer.

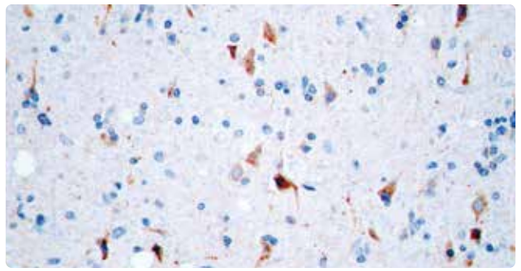




Amyloid-β

- HIER
- Clone B-4
- Cytoplasm
- Cat.No. GT2299

Amyloid-β (β-amyloid, Aβ) is A peptide containing 39 to 43 amino acids produced by the proteolysis of Amyloid precursor protein by β-secretase and γ-secretase. Aβ is found in the extracellular fibrous deposits of brain tissue. It is the main protein component of amyloid nuclei and neuroinflammatory plaques, and can also be found in the protein deposits of neurofibrillary tangles. Alzheimer's disease (AD) is the main cause of Alzheimer's disease (AD), which is characterized by abnormal deposition of fibrin in the brain. Beta-amyloid has also been detected in Lewy body dementia, Down's syndrome, amyloidosis (Dutch type), and Guam Parkinson's dementia syndrome.

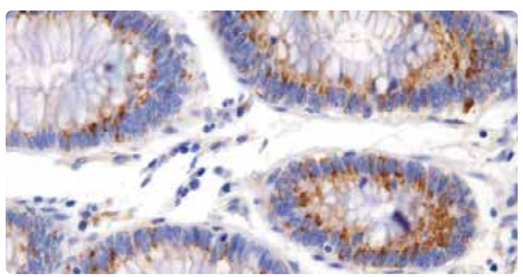


APC

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2392

APC (Adenomatous Polyposis Coli) is a tumor suppressor gene. It has functions such as regulating cell proliferation, migration, adhesion and chromosome stability. Its gene mutation causes the accumulation of β-catenin in the nucleus, which enhances the Wnt pathway and abnormally activates the downstream genes, losing its regulatory function on the cytoskeleton, leading to abnormal cell proliferation and the occurrence of familial adenomatous polyposis (FAP). It can be used for screening FAP disease. In addition, APC gene mutation also exists in sporadic colorectal tumors, gastric cancer, esophageal cancer and other tumors without FAP. APC gene methylation can be detected in breast cancer, liver cancer, lung cancer and other tumors.

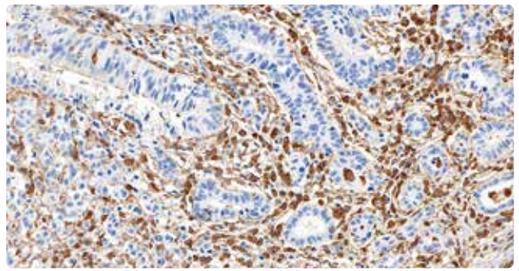


Annexin A1

IVD

- HIER
- Clone poly
- Cytoplasm/membrane/nucleus
- Cat.No. GT2486

Annexin A1 is a member of the structure-related calcium-dependent phospholipid binding protein superfamily, which is widely distributed in human tissues. It is an endogenous anti-inflammatory mediator that plays a role in innate and adaptive immunity by controlling inflammatory biosynthesis, prostaglandins and leukotriene mediators. Annexin A1 is highly specific and sensitive in hairy cell leukemia, but not expressed in other B-cell lymphomas. Therefore, Annexin A1 can be used to distinguish leukemia from other B-cell lymphomas. High expression of Annexin A1 is also frequently found in esophageal and esophagogastric junction adenocarcinoma, is associated with pathologic T stage and the presence of distant metastasis, and is an independent prognostic indicator.

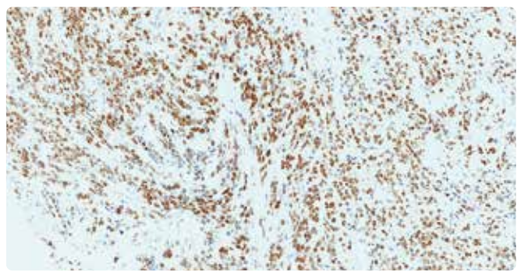


AR

IVD

- HIER
- Clone EP120
- Nucleus
- Cat.No. GM3562

Retinoblastoma gene protein (Rb) is a tumor suppressor gene. Rb protein is a phosphoprotein located in the nucleus. Phosphorylation and dephosphorylation of Rb protein are the main forms of Rb protein regulating cell proliferation and differentiation. The dephosphorylated Rb protein binds to the transcription factor E2F, leaving E2F in an inactive state and inhibiting the cell transition from G1 to S phase. The abnormal expression of Rb protein is closely related to the occurrence of some tumors, such as retinoblastoma, breast cancer, esophageal cancer, prostate cancer, small cell lung cancer and so on.

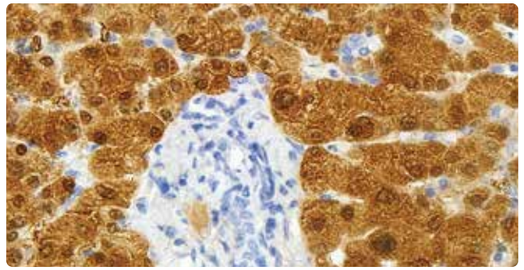


Arginase-1

IVD

- HIER
- Clone EP261
- Cytoplasm/nucleus
- Cat.No. GT2183

Arginase-1 (Arg-1) is a binuclear manganese metalloenzyme, which has two isoforms: type 1 and type 2. Arg-1 is abundantly expressed in the liver and is a novel hepatocyte marker. Studies have shown that Arginase-1, HepPar-1 and Glypican-3 are the most effective combined markers for the differential diagnosis of hepatocellular carcinoma and metastatic tumors in the liver.

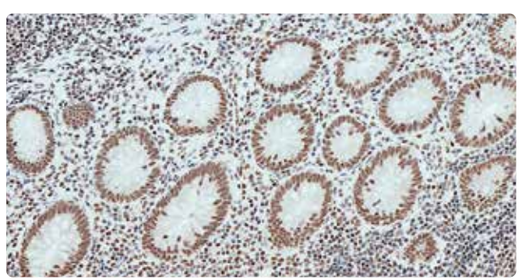


ARID1B

IVD

- HIER
- Clone 2D2
- Nucleus
- Cat.No. GT2591

ARID1B, a component of the SWI/SNF chromatin remodeling complex, is involved in transcriptional activation and repression of selected genes through chromatin remodeling and may play a role in cell cycle activation. ARID1B and ARID1A are mutually exclusive, and ARID1B is a gene preferentially required for the survival of ARID1A mutant cancer cell lines. When ARID1A is deficient, loss of ARID1B causes SWI/SNF complex instability and affects the proliferation of cancer cells and primary cells. ARID1A and ARID1B are frequently comutated in cancers, but ARID1A-deficient cancers retain at least one functional ARID1B allele. Thus, loss of ARID1A and ARID1B alleles cooperates to promote cancer formation.

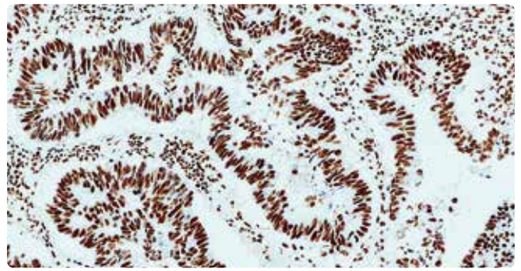


ARID1A

IVD

- HIER
- Clone GR014
- Nucleus
- Cat.No. GT2519

ARID1A gene is a tumor suppressor gene with a high mutation rate in cancer cells. Its expression product ARID1A is a component of the SWI/SNF complex, which plays an important role in the formation of chromatin structure and participates in DNA replication, transcription, repair and other processes. It plays an important role in ensuring the normal DNA repair of cells. ARID1A deletion has been reported to occur in 42%-59% of patients with ovarian clear cell carcinoma, 26%-34% of patients with uterine endometrioid carcinoma, and 21% of patients with ovarian endometrioid carcinoma. Therefore, ARID1A can be used in the diagnosis of gynecological malignant tumors.

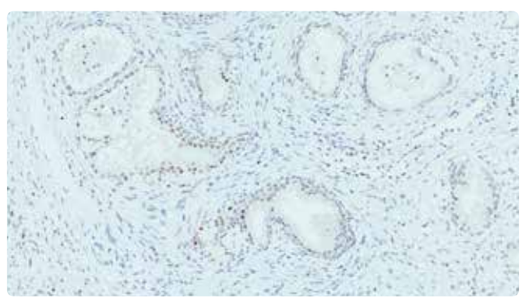


AR-V7

IVD

- HIER
- Clone EPR15656
- Nucleus
- Cat.No. GT2576

Ar-v7 belongs to the nuclear hormone receptor family and contains the nuclear receptor DNA-binding domain and AR transcriptional activation domain, but lacks the C-terminal androgen binding site. Ar-v7 is a hormone-independent splice variant of the androgen receptor, in which the AR pathway is continuously activated in the presence or absence of androgens. Therefore, AR-V7 plays an important role in the occurrence and development of prostate cancer and the generation of drug resistance.

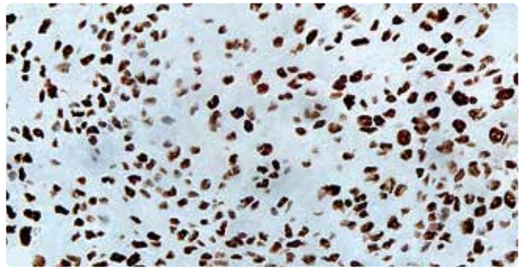


ATRX

IVD

- HIER
- Clone D-5
- Nucleus
- Cat.No. GT2241

ATRX (α-Thalassaemia/Mental retardation syndrome, X-linked, α-Mediterranean ATRX protein belongs to SWI2/SNF2 protein family and is a transcriptional regulator. It regulates transcription by modifying the local structure of chromatin. The loss of expression in diffuse astrocytoma, but not in pilocytic astrocytoma, has reference value in the differential diagnosis of pilocytic and diffuse astrocytoma. ATRX mutation combined with IDH mutation and 1p/19q gene status can help to predict the prognosis of patients with high-grade gliomas.

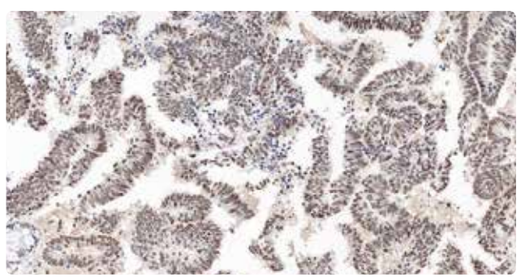


BAP1

IVD

- HIER
- Clone C-4
- Nucleus
- Cat.No. GT2567

The BAP1 gene (BRCA1-associated protein 1) is an 80kDa protein that removes ubiquitin modifiers by targeted degradation or altering the active function of other proteins. Thus, BAP1 contributes to the function of target proteins involved in regulating different cellular processes. Germline mutations in the BAP1 gene have been identified as the genetic driver of a novel tumor-predisposition syndrome that results in an increased risk of inherited, early-onset cancers. BAP-1 is associated with the early onset and/or increased risk of several types of cancer, including melanoma, malignant mesothelioma, colon cancer, renal cell carcinoma, and other malignancies. Identification of BAP-1 deletion is of great significance for early screening, diagnosis and prognosis of cancer.

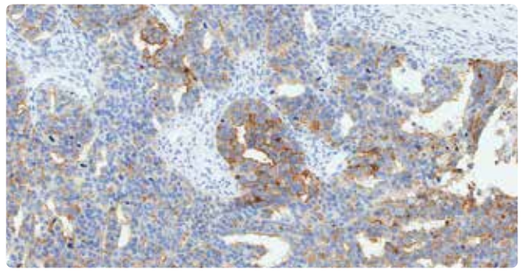


B7H4

IVD

- HIER
- Clone EPR20236
- Membrane
- Cat.No. GT2513

B7-H4, also known as VTCN1, is a transmembrane protein that binds to receptors on activated T cells and inhibits T cell effector function through cell cycle arrest, reduced proliferation, and reduced IL-2 production. B7-H4 protein expression is limited in normal tissues, but it is upregulated on the surface of a variety of cancer cells and immunosuppressive tumor-associated macrophages (Tams), and is most prevalent in ovarian, cholangiocarcinoma, breast cancer, and endometrial cancer. Its expression level is negatively correlated with the survival rate of patients with the above-mentioned cancers, and thus it is expected to be a therapeutic target.

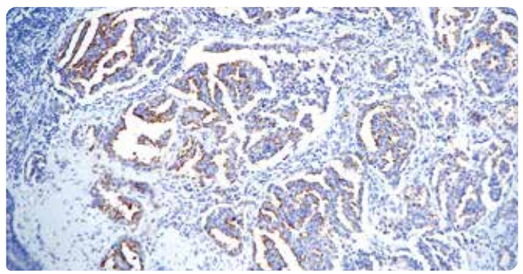


BCA-225

IVD

- HIER
- Clone Cu-18
- Cytoplasm
- Cat.No. GT2134

BCA-225 (Breast cancer antigen-225) is a glycoprotein secreted by breast cells. Bca-225 is usually highly expressed in breast cancer, kidney cancer and ovarian cancer, but not in colon cancer and hepatocellular carcinoma. It is often used in combination with CEA, CA19-9 and CA125 as a reference for the study of metastatic adenocarcinoma.

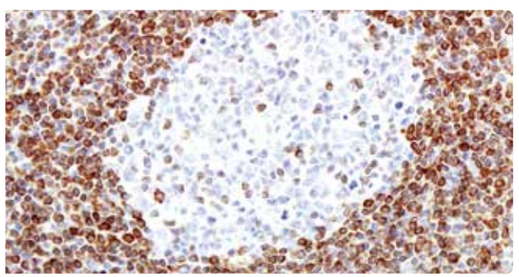


Bcl-2

IVD

- HIER
- Clone 124
- Cytoplasm
- Cat.No. GM0887

BCL-2 (B-cell lymphoma-2, B-cell lymphoma-2) is a mitochondrial inner membrane protein. It is widely present in tissues and can inhibit cell apoptosis. Small B lymphocytes and many T cells in the mantle usually express Bcl-2, accompanied by t (14; 18) (q32; q21) translocated follicular lymphoma with overexpression of Bcl-2. 85% of follicular lymphomas and 20% of diffuse large B-cell lymphomas express Bcl-2, and all of them are accompanied by t (14; 18) translocation, but not t (14; 18) can also express Bcl-2. The thymus tissue also expressed Bcl-2, but most cells were weakly positive in medulla and cortex. The expression of Bcl-2 was strongly positive in normal breast epithelium, and some cells in the stroma around the normal breast lobules were also positive. "Breast cancers often express Bcl-2, especially in older patients, low-grade, small, and ER-or PR-positive tumors." The expression of Bcl-2 tends to decrease with tumor progression, and tamoxifen can reduce its expression. Bcl-2 expression can be distinguished from follicular lymphoma and follicular hyperplasia: 85% of follicular lymphoma cells were cytoplasmic positive, whereas in follicular hyperplasia only scattered T cells in the germinal center were positive. Bcl-2 was found to be positive in monocytoid B-cell lymphoma but negative in monocytoid B-cell hyperplasia lesions. Bcl-2 can also be used to determine whether follicular lymphoma involves bone marrow. Primary breast cancers are usually positive for Bcl-2, whereas lung and gastrointestinal tumors with metastasis to the breast are rarely positive (even if positive, it is focally weakly expressed). In some cancers, Bcl-2 positivity is an indicator of a better prognosis and is inversely correlated with P53 expression. In cervical intraepithelial neoplasia, the number of Bcl-2 positive cells correlated with the grade of CIN. Bcl-2 was diffusely expressed in the majority of basal cell carcinomas, but the superficial cells of the apocrine epithelial tumors were stained.

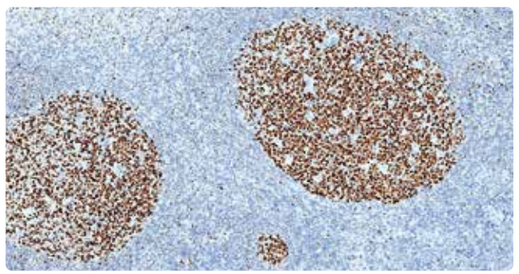


Bcl-6

IVD

- HIER
- Clone GR024
- Nucleus
- Cat.No. GT2055

B-cell lymphoma-6 (BCL-6) is a proto-oncogene. Bcl-6 is expressed in normal follicular germinal center B cells and their associated lymphomas. The expression of Bcl-6 was detected in follicular lymphoma, diffuse large B-cell lymphoma, Burkitt lymphoma and nodular lymphoid predominant Hodgkin's lymphoma. When splenic marginal zone lymphoma transformed into diffuse large B-cell lymphoma, Bcl-6 expression was also detected. Many positive cells could also be detected in angioimmunoblastic T-cell lymphoma. In addition, it should be noted that many normal T cells also express Bcl-6.

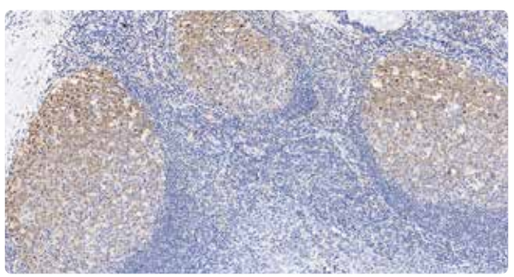


Bcl-10

IVD

- HIER
- Clone 331.3
- Membrane/cytoplasm
- Cat.No. GT2133

Bcl-10 is a gene found in chromosome translocation of mucosa-associated lymphoid tissue (MALT) lymphomas. It belongs to an apoptosis regulatory gene located at 1p22 and encodes an intracellular protein consisting of 233 amino acids. BCL10 can regulate cell apoptosis and participate in NF-κB signal transduction. Bcl10 can be used in the study of lymphoma and other malignant tumors.

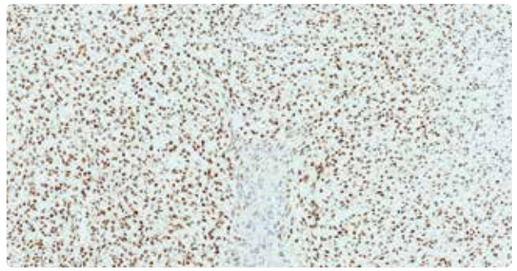


BCOR

IVD

- HIER
- Clone C-10
- Nucleus
- Cat.No. GT2469

BCOR is composed of 1,755 amino acids and plays an important role in normal early embryonic development. BCOR is expressed in a variety of tumors, such as rhabdomyosarcoma, synovial sarcoma, ossificating fibromyxoid tumor, central nervous system PNET, retinoblastoma, medulloblastoma, hematological malignancies, small round blue cell sarcoma, endometrial stromal sarcoma, and renal clear cell sarcoma with BCOR gene abnormality or UWHAE-NUTM2 fusion.

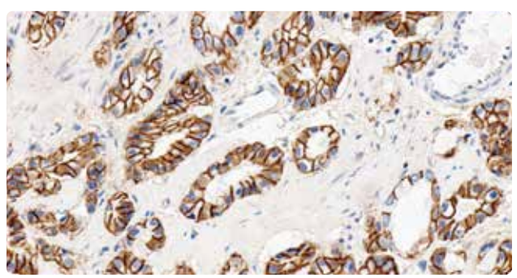


β-catenin

IVD

- HIER
- Clone EP35
- Cytoplasm/membrane/nucleus
- Cat.No. GT2119

β-Catenin, a cytoskeletal protein, is associated with Wnt signaling and cell adhesion mechanisms. Under normal circumstances, β-Catenin protein mainly exists in the cell membrane of normal cells, and its gene mutation leads to accumulation in the nucleus. At present, β-Catenin gene mutation has been found in a variety of tumors, such as colon cancer, lung cancer, prostate cancer, esophageal cancer, breast cancer, ovarian cancer, endometrial cancer, familial adenomatous polyposis, fibroadenoma, solitary fibrous disease, solid pseudopapillary tumor of pancreas and so on. It is mainly used in the diagnosis of malignant tumors, invasion and metastasis mechanism research.

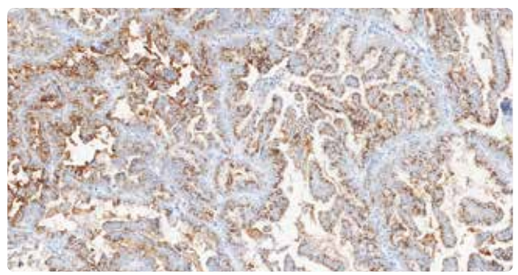


BG8

IVD

- HIER
- Clone GM507
- Cytoplasm/membrane
- Cat.No. GT2502

BG8 (blood group 8), also known as Lewis y antigen, was first discovered in SK-LU-3 lung cancer cell line. It is a blood group antigen and is mainly expressed in some epithelial cells and some secretions. BG8 is involved in cell adhesion, recognition and signal transduction. It may help to classify kidney and bladder tumors and can also be used as a marker for cancers such as cholangiocarcinoma, liver cancer and breast cancer.

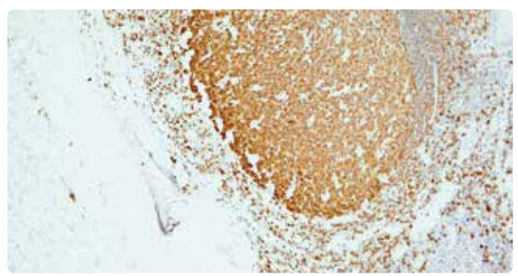


Bob.1

IVD

- HIER
- Clone Wue-AC5
- Cytoplasm/nucleus
- Cat.No. GT2284

BOB1 (B-cell oct-binding protein 1) is a transcription factor required for germinal center formation and immunoglobulin production. BOB.1 functions in conjunction with OCT2 as a coactivator. BOB.1 is less cell-line specific than OCT2 and is expressed in T-cell and B-cell lymphomas. Normal GCB cells were strongly positive for BOB.1 and Oct-2. L&H cells in nodular lymphocyte-predominant Hodgkin's lymphoma (NLPHL) were both positive for BOB.1 and Oct-2. The H/RSC cells in classical Hodgkin's lymphoma (cHL) were both negative for BOB.1 and Oct-2 or positive for both. A few T-cell lymphomas occasionally expressed BOB.1. It can be used in the diagnosis of B-cell lymphoma and NLPHL.

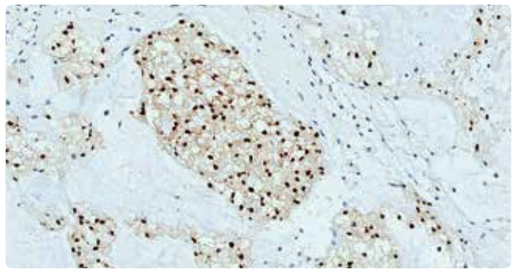


Brachyury

IVD

- HIER
- Clone GR501
- Cytoplasm/nucleus
- Cat.No. GT2332

Brachyury, a novel chordoma marker, is expressed only in notochordal tissues and chordogenic tumors, but not in other tumors (chondroid tumors and other types of tumors) and normal tissues. Cytoplasmic staining can be used to distinguish hemangioblastoma (sensitivity 91%, specificity 100%) from renal cell carcinoma.

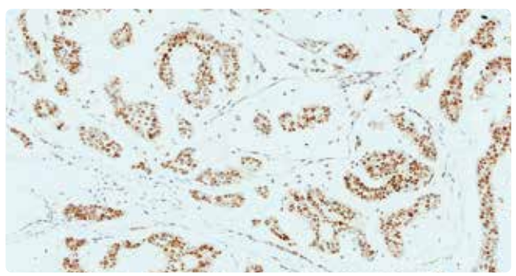


BRCA1

IVD

- HIER
- Clone EPR19433
- Cytoplasm/nucleus
- Cat.No. GT2375

BRCA1 is a tumor suppressor gene located on chromosome 17q21. It plays a tumor suppressor role by participating in intracellular DNA repair, mRNA transcription, cell cycle regulation and protein synthesis. Loss of BRCA1 function increases the susceptibility to breast and ovarian cancer. The relationship between BRCA1 and familial breast and ovarian cancer is clear, and it is mainly used in the research of breast and ovarian cancer. It is of great significance to identify specific BRCA1 deletions in early screening, diagnosis and prognosis of cancer.

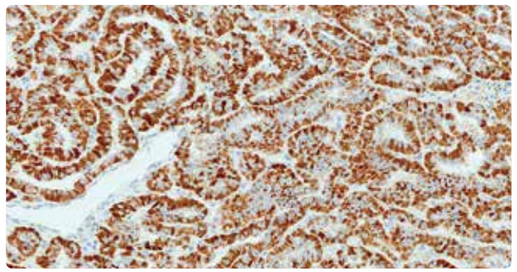


BRAF V600E

IVD

- HIER
- Clone RM8
- Cytoplasm
- Cat.No. GT2435

BRAF is a class of serine-threonine kinases that participate in cell proliferation through activation by forming heterodimers or homodimers. BRAF gene mutation is mostly located at codon 600. The valine of the mutated protein is replaced by glutamic acid, which is usually labeled as BRAF V600E. This substitution leads to the activation of the MERK/ERK pathway, thereby promoting cell proliferation. BRAF V600E is found in melanoma, papillary thyroid carcinoma, pleomorphic xanthoastrocytoma, Langerhans cell histiocytosis, ovarian borderline tumor, glioma, colon cancer and pilocytic astrocytoma.

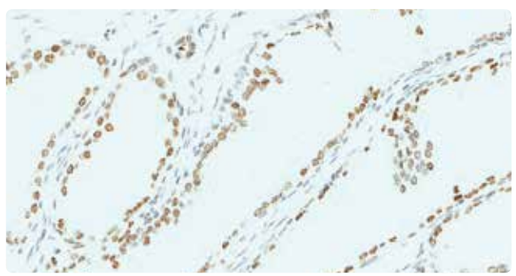


Brg1/SMARCA4

IVD

- HIER
- Clone GR005
- Nucleus
- Cat.No. GT2333

Brg1/SMARCA4, a SWI/SNF complex, is a member of the ATP-dependent chromosome remodeling complex family. SWI/SNF complex plays an important role in a series of important biological behaviors such as proliferation, differentiation and DNA damage. Swi/SNF complex can bind to BRCA1 and regulate the expression of the tumorigenic protein CD44. It is expressed in many normal epithelia. The expression was absent in most of the hypercalcemic small cell carcinomas, some of the ovarian clear cell carcinomas and endometrial stromal sarcoma, and some of the adrenal carcinomas, lung carcinomas, medulloblastoma carcinomas and pancreatic carcinomas. About 50% of dedifferentiated carcinomas lost expression.

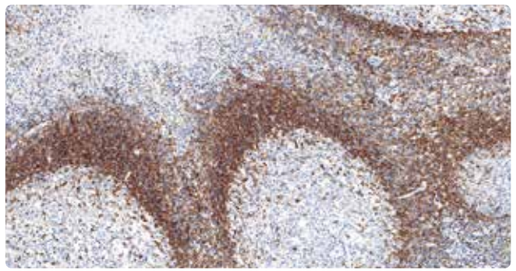


BTLA/CD272

IVD

- HIER
- Clone EPR22224-271
- Membrane/cytoplasm
- Cat.No. GT2406

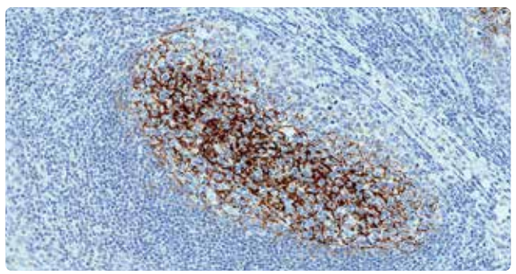
B-and T-Lymphocyte Attenuator (BTLA) is a member of CD28 family, also known as CD272. Its structure and function are similar to those of PD-1 and CTLA-4, and it is also an important check-point molecule in immune regulation. BTLA is expressed on T cells, quiescent B cells, macrophages, dendritic cells, and NK cells, and its ligand is herpesvirus entry mediator (HVEM). When BTLA binds to HVEM, it generates inhibitory signals that inhibit T cell activation. High expression of BTLA is associated with poor prognosis of malignant tumors such as breast cancer, gastric cancer, bladder cancer, melanoma, and ovarian cancer.



C4d

- HIER
- Clone GR527
- Membrane/cytoplasm
- Cat.No. GT2599

C4d is a stable fission product of classical complement activation, which can be used to detect chronic renal transplant rejection as well as hyperacute rejection, acute vascular rejection, acute cellular rejection and marginal rejection. In these rejections, C4d is deposited in the renal peritubular capillaries. C4d detection can be used as an important indicator of renal transplant survival and the treatment of acute rejection.

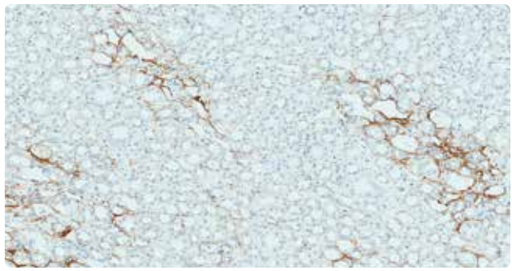


C3d

IVD

- HIER
- Clone E28-P
- Cytoplasm
- Cat.No. GT2595

The complement component C3 is a component of the classical, lectin, and alternative pathways, and its cleavage products are involved in immune responses such as opsonization and cell lysis. C3d, a fragment of C3, is a stable marker of complement activation that binds to pathogen surfaces to promote B-cell activation, and its deposition has also been observed in the perirubular capillaries of transplanted kidneys undergoing acute allograft rejection. C3d can be detected in the activated state of complement and in the diseased tissue after complement activation, which can be used as a standard to measure the health status of the body and auxiliary diagnosis of diseases.

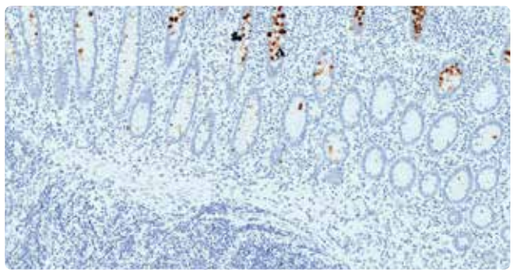


CA 19-9

IVD

- HIER
- Clone 121SLE
- Cytoplasm
- Cat.No. GT2120

CA19-9 is a cell surface glycoprotein, also known as gastrointestinal cancer antigen. Ca19-9 is widely distributed in the ductal epithelium of the breast, kidney, salivary gland, sweat gland, hepatobiliary duct and duct epithelium, and prostatic duct epithelium. This antibody is mainly used in the diagnosis and research of digestive tract tumors, and is an important reference index for the diagnosis of pancreatic cancer.

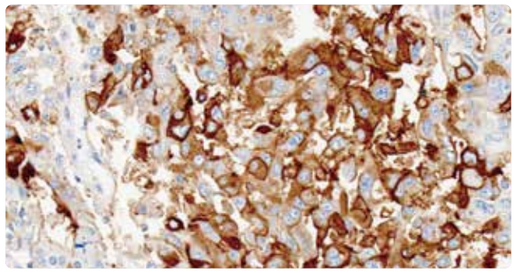


CA72.4 (TAG-72)

IVD

- HIER
- Clone B72.3
- Cytoplasm
- Cat.No. GT2076

TAG-72 (Tumor-Associated Glycoprotein 72), also known as CA72.4, is a tumor-associated carcinoembryonic antigen. It is expressed in most adenocarcinomas, such as colon cancer, gastric cancer, ovarian cancer and non-small cell lung cancer, and can be used to distinguish adenocarcinoma from mesothelioma.

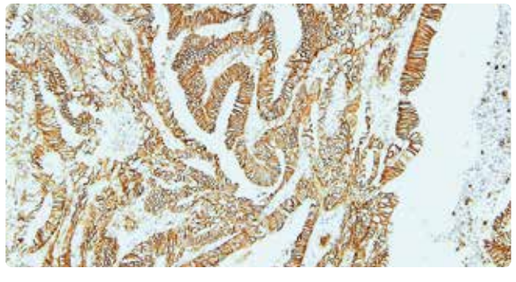


Cadherin 17

IVD

- HIER
- Clone SDM4
- Cytoplasm
- Cat.No. GT2208

Cadherin 17/CDH17, also known as hepato-enteric cadherin, belongs to the cadherin superfamily and mediates cell-cell adhesion and intestinal peptide transport. It is mainly expressed in the epithelium of the appendix, colon and small intestine, and rarely expressed in other normal tissues. Studies have shown that Cadherin 17 can be used for the diagnosis and differential diagnosis of intestinal adenocarcinoma. It is diffusely and strongly expressed in colorectal adenocarcinoma, while only focal or scattered expression is found in gastric adenocarcinoma, pancreatic cancer and cholangiocarcinoma. The expression of Cadherin 17 was high in metanephric adenoma, but negative in epithelial predominant Wilms' tumor and solid papillary renal cell carcinoma. The positive rate of primary bladder adenocarcinoma is also high, while it is negative in urothelial carcinoma with glandular differentiation, which can be used for differential diagnosis. CDH17 can be used for the diagnosis of early Barre esophagus. Overexpression of CDH17 in epithelial ovarian cancer indicates poor prognosis.

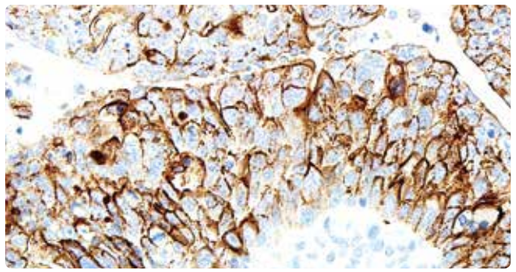


CA125

IVD

- HIER
- Clone EP48
- Membrane/cytoplasm
- Cat.No. GT2028

CA125 (Cancer Antigen 125, cancer antigen-125), also known as MUC16, is a member of the mucoglycoprotein family. It is mainly used as a tumor marker or biomarker in clinical blood samples and pathological immunohistochemical detection. In gynecological practice, CA-125 is mainly used for the detection of ovarian cancer. CA-125 is clinically monitored to screen women for the risk of ovarian cancer. In gynecological immunohistochemistry, CA125 is mainly used in: 1. The diagnosis and differential diagnosis of ovarian mucinous malignant tumors; 2. Auxiliary diagnosis of ovarian serous malignant tumors.

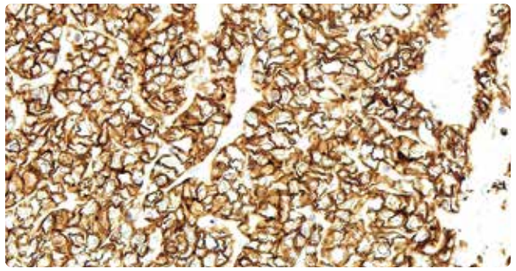


CA IX

IVD

- HIER
- Clone H-11
- Membrane
- Cat.No. GT2240

Carbonic Anhydrase IX (CA IX) is a transmembrane protein on the cell surface and is mainly distributed in the gastrointestinal tract and gallbladder. It is negative in normal colonic epithelium but positive in adenocarcinoma. In breast tumors, CA IX expression is also suggestive of tumor malignancy. CA IX expression is negative in normal kidney, chromophobe renal cell carcinoma and renal oncocytoma, but positive in clear cell renal cell carcinoma. Therefore, CA IX can be used in the differential diagnosis of renal tumors. CA IX is also expressed in other epithelial tumors such as esophageal carcinoma, lung cancer, renal cell carcinoma, cervical cancer, non-small cell lung cancer and so on.

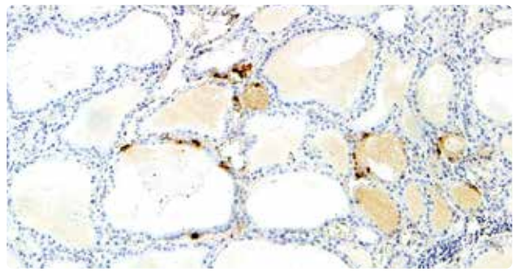


Calcitonin

IVD

- HIER
- Clone GM304
- Cytoplasm
- Cat.No. GT2066

Calcitonin/CT(calcitonin/CT) is secreted by parafollar cells (C cells) of the thyroid gland with a molecular weight of 350kDa and reduces calcium in the blood. It is mainly used in the diagnosis and research of thyroid C cell hyperplasia, medullary thyroid carcinoma, parafolvular thyroid follicular carcinoma and some neuroendocrine tumors.

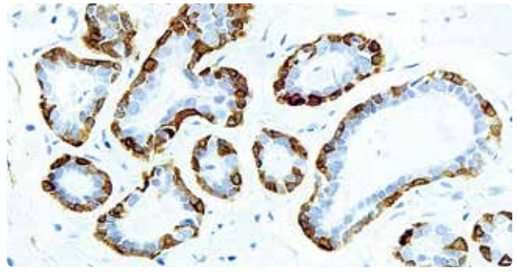


Calponin

IVD

- HIER
- Clone CALP
- Cytoplasm
- Cat.No. GM3556

Calponin, a calmodulin that binds tropomyosin and F-actin, is a specific protein of smooth muscle cells that functions to regulate smooth muscle contraction. Calponin is expressed in the smooth muscle cells of parenchyma and blood vessels; Myofibroblasts in connective tissue; Smooth muscle tumors; Epithelial cells in salivary duct tumors; Nerve sheath myxoma; Glomus tumor; Myofibroblastic sarcoma of bone; Synovial sarcoma (possibly focally positive). This antibody is mainly used in the diagnosis and research of myoepithelial cells in leiomyomas and breast lesions.

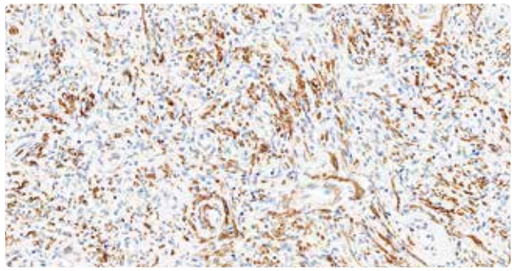


Caldesmon

IVD

- HIER
- Clone h-CALD
- Cytoplasm
- Cat.No. GM3557

Caldesmon (calcium binding protein) is also known as high molecular weight calmodulin-binding protein, h-CD, h-Caldesmon. Caldesmon is a cytoskeleton-related protein that has the function of regulating smooth muscle contraction. For displaying smooth muscle differentiation, h-Caldesmon was superior to Desmin, HHF-35 and SMA. It is clinically used to label smooth muscle cells and cells with smooth muscle differentiation, which can be used to distinguish true smooth muscle tumors from myofibroblastic tumors. Combined with CD10, it can be used to distinguish endometrial stromal sarcoma from highly cellular uterine smooth muscle tumors.

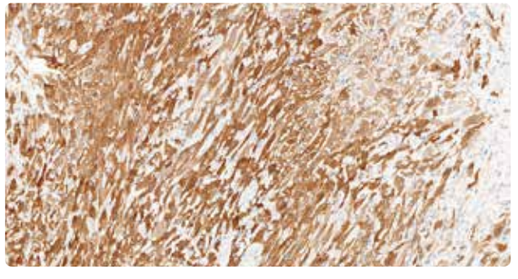


Calretinin

IVD

- HIER
- Clone poly
- Cytoplasm/nucleus
- Cat.No. GT2009

Calretinin, a calcium-binding protein, belongs to the EF-hand protein family with S-100. It is a specific marker for mesothelioma and mesothelioma. The main uses of Calretinin are to distinguish non-neoplastic mesothelial cells from neoplastic cells in exudates; To distinguish adenocarcinoma from mesothelioma; And identify cardiac myxomas and ovarian sex cord-stromal tumors.

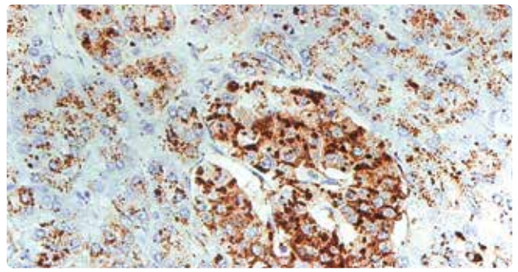


Cathepsin D

IVD

- HIER
- Clone C5
- Cytoplasm
- Cat.No. GT2033

Cathespin D (cathepsin D) is an intracellular lysosomal enzyme widely present in cells, which is related to tumor invasion and metastasis. It is overexpressed in breast cancer and other malignant tumors. Studies have shown that Cathespin D is commonly expressed in ER-negative breast cancer and is associated with the proliferation and metastasis of breast cancer.

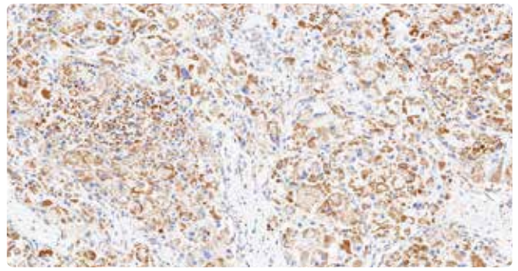


Cathepsin K

IVD

- HIER
- Clone EPR19992
- Cytoplasm
- Cat.No. GT2547

Cathepsin K is a protein composed of 329 amino acids, which is related to bone remodeling/resorption. It is mainly expressed in osteoclasts, and also expressed in skin, heart, skeletal muscle, lung, placenta, ovary, testis, small intestine and colon. Cathepsin K can be used in the differential diagnosis of MIT family ectopic renal cell carcinoma and clear cell renal cell carcinoma.

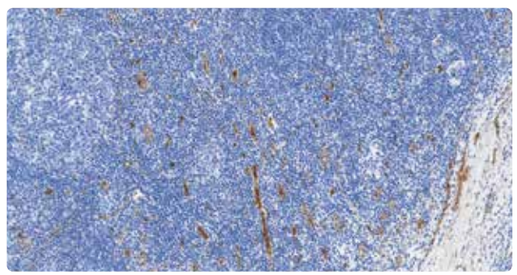


Caveolin-1

IVD

- HIER
- Clone GR108
- Membrane
- Cat.No. GT2344

Caveolin-1, a member of the Caveolin family, is a major membrane intrinsic protein in caveolin-like invagination on the cell surface. It plays a certain role in maintaining the integrity of caveolin-like invagination, transporting small cells and signal transduction. Caveolin-1 is widely distributed in epithelial cells, endothelial cells, fibroblasts and smooth muscle cells, and plays an important role in a variety of diseases, including cardiovascular disease, cancer, diabetes and so on. In recent years, as a member of the Caveolin family, caveolin-1 plays an important role in the occurrence, development and metastasis of tumor cells.

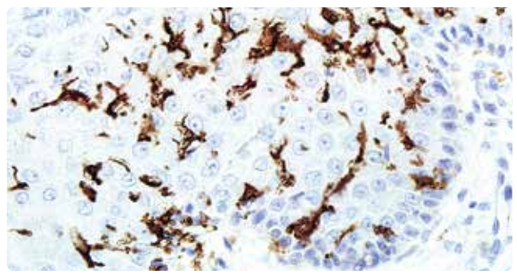


CD1a

IVD

- HIER
- Clone O10
- Membrane/cytoplasm
- Cat.No. GM3571

CD1a is a metastatic membrane protein expressed on gastrointestinal epithelial cells, B lymphocytes, dendritic cells, and 70% of thymocytes. Cd1a is mainly used to label T cells and their lymphomas, Langham's cells and their tumors, and can also be used for the differential diagnosis of thymic carcinoma and lung tumors. CDla is often used in combination with S-100 and CD68 antibodies for the diagnosis of Langhan's histiocytosis.

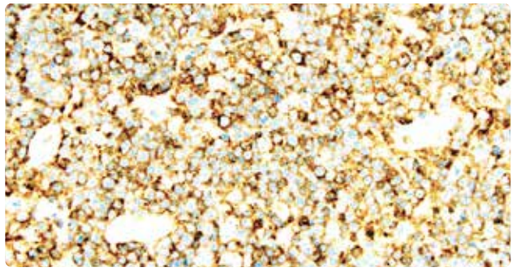


CD2

IVD

- HIER
- Clone GR103
- Membrane
- Cat.No. GM7309

CD2, also known as LFA-3 (leukocyte function-associated antigen), Leu-5 or sheep red blood cell receptor, is a member of the immune Ig superfamily and is present on the membrane of mature T cells and natural killer cells, but is not expressed on B lymphocytes. Normal bone marrow cells or mast cells do not express CD2, but mast cells in mastocytosis express CD2, and this antibody is mainly used to identify cells.

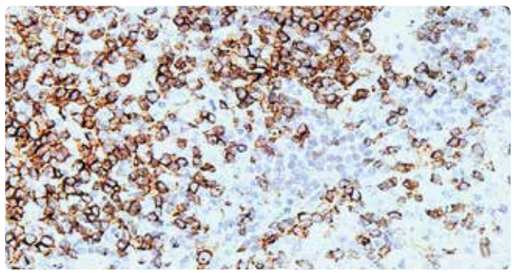


CD4

IVD

- HIER
- Clone EP204
- Membrane
- Cat.No. GT2191

CD4 molecule is a glycoprotein present on the surface of most helper/inducer T cells. It is a receptor for MHC class II molecules and also a receptor for HIV. It is expressed on helper/inducer T lymphocytes, myeloid cells and histiocytes. It can be used for the diagnosis of primary cutaneous small/medium CD4+T cell lymphoma. CD4 is more positive than CD8 in ALCL, and CD4 is positive in true histiocytic lymphoma and blastic NK-cell lymphoma. It is mainly used for the classification of T cell lymphoma.

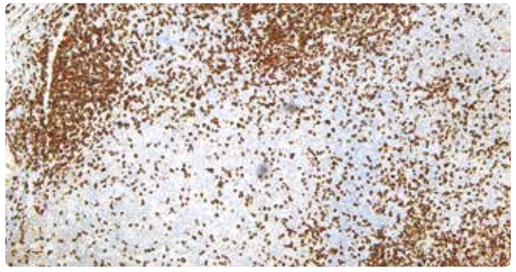


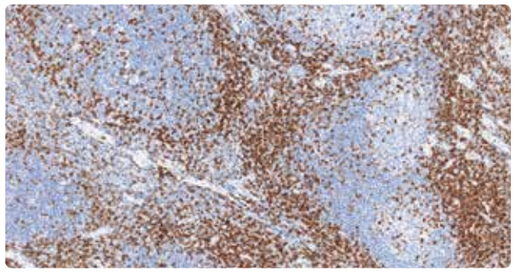
CD3

IVD

- HIER
- Clone LN10/GR107
- Membrane/cytoplasm
- Cat.No. GT2002/GA0452

CD3 is a complex molecule composed of five peptide chains, which is expressed on the surface of all T cells. CD3 and T cell antigen recognition receptor (TCR) constitute complex receptor molecules, which is the main unit of T cell recognition of antigen, and has the role of stabilizing TCR structure and transmitting activation signals. CD3 was not expressed by B cells, myeloid cells, macrophages or any other cells except Purkinje cells in the cerebellum. Therefore, CD3 is a specific T cell antibody. This antibody recognizes neoplastic and non-neoplastic T lymphocytes as well as NK cells. CD3 negativity can be present in some mycosis fungoides, pleomorphic lymphoma, and anaplastic large-cell lymphoma. CD3ε is expressed in nasal-type NK/T-cell lymphoma.



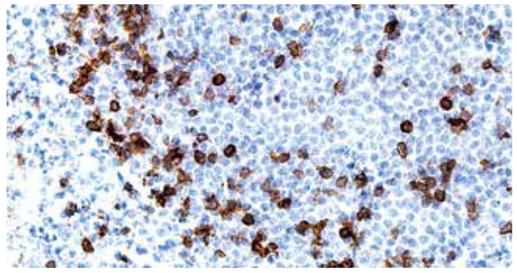


CD5

IVD

- HIER
- Clone GR526
- Membrane/cytoplasm
- Cat.No. GM3633

CD5 is a transmembrane glycoprotein that is expressed on the surface of almost all mature human T cells, and the intensity of expression increases as T cells mature. CD5 is also expressed in a small subset of normal human B cells (20% of B cells in the peripheral blood and scattered cells in the mantle of lymph nodes). CD5 expression is detected in most T-cell lymphomas and leukemia-the absence of CD5 in the latter indicates a worse prognosis. The abnormal absence of CD5 expression in T-cell lymphomas is also helpful in differentiating it from reactive T-cell proliferation. Among B-cell lymphomas, small B-cell lymphomas and mantle-cell lymphomas are CD5-positive, whereas follicular lymphomas, marginal zone lymphomas, and lymphoplasmacytoid lymphomas are CD5-negative. The expression of CD5 was observed in thymic carcinoma and atypical thymoma. Other cancers were negative. Therefore, CD5 is mainly used in the classification of small B cell lymphoma and the diagnosis and prognosis of T cell lymphoma, and can also be used in the differentiation of thymic carcinoma from other adenocarcinomas.

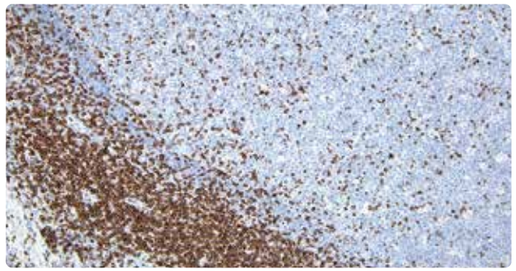


CD7

IVD

- HIER
- Clone EP132
- Membrane
- Cat.No. GT2282

CD7, a member of immunoglobulin superfamily, is one of the markers of early T cell lineage in thymus. "Cd7 is a pan-T cell marker expressed on thymocytes, T cells, NK cells, lymphoid and myeloid cell precursors." They are mostly positive in T-LBL/T-ALL. Some cases of acute myeloid leukemia also showed positive expression. CD7 may be abnormally absent in T-cell lymphomas, which can help to distinguish it from reactive T-cell proliferation and is more sensitive than CD2 and CD5. CD7 expression is usually absent in mycosis fungoides /Sezary syndrome. It is mainly used in the research of lymphohematopoietic system diseases.

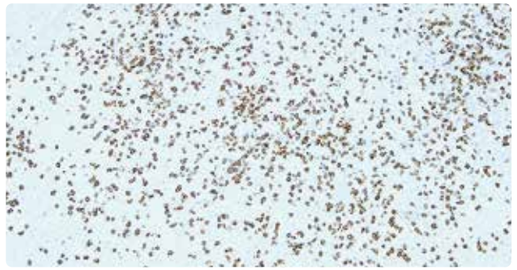


CD8

IVD

- HIER
- Clone SP16
- Membrane
- Cat.No. GT2112

CD8 is a glycoprotein on the surface of inhibitory/cytotoxic cells. It is the receptor of MHC class Ⅰ molecules and regulates the function of TCR/CD3 complex. It can mark inhibitory/cytotoxic T cells and NK cells. It was also expressed in large granular lymphocytic leukemia. This antibody is mainly used to label cytotoxic T cells and NK cells. It can also be used as a marker for precursor T lymphoblastic leukemia/lymphoma. Combined with CD4 MCAB, CD4/CD8 ratio can be used for the diagnosis, curative effect and prognosis of some diseases.

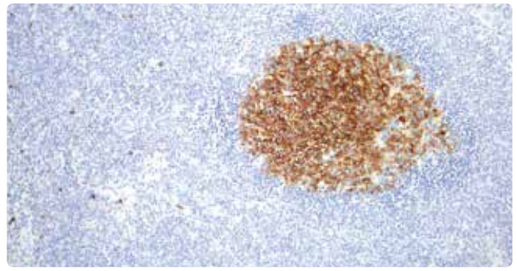


CD10

IVD

- HIER
- Clone GM106
- Membrane
- Cat.No. GT2004

CD10, also known as acute lymphoblastoid common antigen (CALLA), is a glycoprotein with a molecular weight of 100kDa. "CD10 antigen can be expressed on immature B cells, some immature T lymphocytes and mature granulocytes, germinal center cells, fibroblasts, melanoma cell lines, glomeruli and renal tubules, bile ducts, 75% of B-cell precursor acute lymphoblastic leukemia, all subtypes of AML, some T lymphoblastic lymphomas, some follicular lymphomas, myeloma. And solid pseudopapillary neoplasms of the pancreas. "In addition, the endometrial stroma (not glands), endometrial stromal nodules, and low-grade endometrial stromal sarcoma are CD10 positive, whereas the undifferentiated carcinomas and smooth muscle tumors of the uterus are usually only focally or weakly positive." This antibody is mainly used in lymphoma classification and in the diagnosis of endometrial stromal sarcoma.

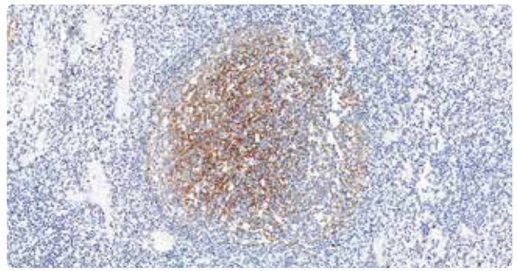


CD11b

IVD

- HIER
- Clone GM112
- Membrane
- Cat.No. GT2543

CD11b is also known as integrin αm chain, which is a heterodimeric internal membrane protein composed of α and β chains. This I domain-containing α integrin binds to β2 chain (ITGB2) to form leukocyte specific integrin, called macrophage receptor 1 (" Mac-1 ") or inactivated C3b (iC3b) receptor 3 (" CR3 "). CD11b is mainly expressed on monocytes, macrophages, granulocytes and NK cells, and plays an important role in the chemotaxis, adhesion and phagocytosis of immune cells.

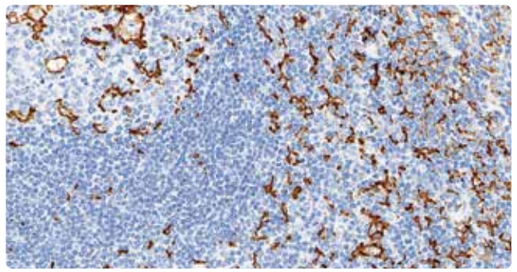


CD11c

IVD

- HIER
- Clone 5D11
- Membrane
- Cat.No. GT2270

CD11c is a member of the integrin family of adhesion proteins. Cd11c was expressed in normal tissues, mainly in myeloid cells such as myeloblasts, promyelocytes, metachronoblasts, non-lobulated and lobulated nuclear neutrophils in bone marrow, at high levels in tissue macrophages and monocytes, and at low levels in granulocytes. It is also reported in the literature that it is expressed in NK cells, activated T cells, and lymphocyte lines, including hairy cell leukemia and some finger dendritic cells. CD11c antigen expression is a useful marker of monocytic differentiation in the classification of acute myeloid leukemia and a useful indicator for identification of hairy cell leukemia.

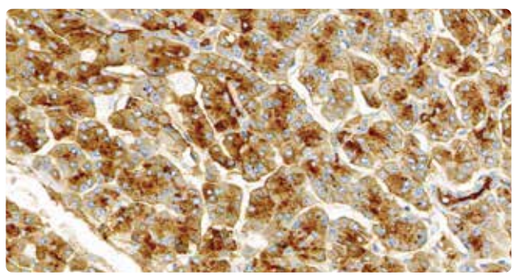


CD13

IVD

- HIER
- Clone EP117
- Membrane/cytoplasm
- Cat.No. GT2218

CD13 is a transmembrane protease found in a variety of tissue cell types, such as endothelial cells, epithelial cells, fibroblasts and granulocytes. CD13 is upregulated in a variety of malignant solid tumors and leukemias, including acute myeloid leukemia (AML). The high expression of CD13 in tumor cells makes it very useful in the diagnosis of this subtype of AML, but it should be combined with CD34 (+), CD117 (+), CD16 (-) and CD33 (+) in the diagnosis. The high expression of CD13 in myeloid sarcoma makes it very useful in the diagnosis of this tumor as well.

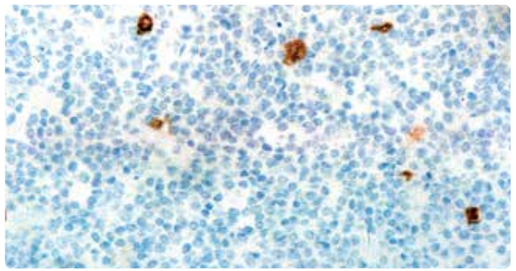


CD14

IVD

- HIER
- Clone EP128
- Membrane/cytoplasm
- Cat.No. GT2298

CD14 is a glycoprotein expressed on monocytes/macrophages and Langerhans cells, but not on stem cells, bone marrow cells and thymocytes in early differentiation. It is mainly used in the study of monocytic leukemia, true histiocytic lymphoma and histiocytosis, and in the study of immunophenotyping of acute myeloid leukemia.

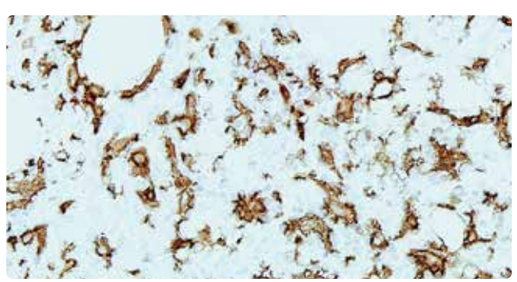


CD16

IVD

- HIER
- Clone EP364
- Membrane/cytoplasm
- Cat.No. GT2203

CD16 is an Fc receptor with a low affinity for the IgG-Fcγ receptor III complex. CD16 is a biomarker associated with monocytes and natural killer (NK) cells in the lymphatic system. Immunohistochemical detection of CD16 can be used to differentiate gamma-delta T-cell lymphoma of the liver and spleen from gamma-delta T-cell large granular lymphocytic leukemia from peripheral T-cell lymphomas such as mucocutaneous gamma-delta T-cell lymphoma. CD16 expression has been reported in approximately 58% of gamma-delta T-cell lymphomas of the liver and spleen and 86% of gamma-delta T-cell large granular lymphocytic leukemia, whereas cutaneous and mucosal gamma-delta T-cell lymphomas do not express CD16. The antibody can also be used to study the role of NK cells in autoimmune, tumor and infectious diseases.

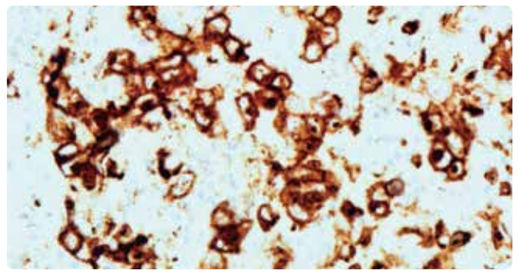


CD15

IVD

- HIER
- Clone MMA
- Membrane/cytoplasm
- Cat.No. GT2118

CD15 is a carbohydrate expressed on 95% of granulocytes, including neutrophils, eosinophils, and monocytes. It is also expressed on R-S cells in Hodgkin's lymphoma and some types of epithelial cells. More than 50% of adenocarcinomas have significant cytoplasmic positive CD15 expression, but CD15 expression is not found in mesothelioma. Almost ALL chronic myeloid leukemia (CML) expressed CD15, while acute lymphoblastic leukemia (ALL) rarely expressed CD15. This antibody is mainly used in the research of Hodgkin's lymphoma and granulocytic sarcoma.

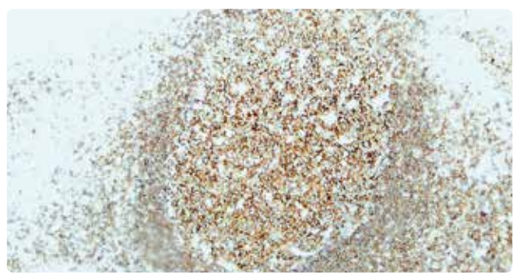


CD19

IVD

- HIER
- Clone GR105
- Membrane
- Cat.No. GT2128

CD19 is a 95kDa glycoprotein expressed on the surface of pre-B cells and mature B cells, which is related to the regulation of B cell activation and development. It is not expressed in T cells and normal granulocytes. This antibody is mainly used to label normal and neoplastic B cells.

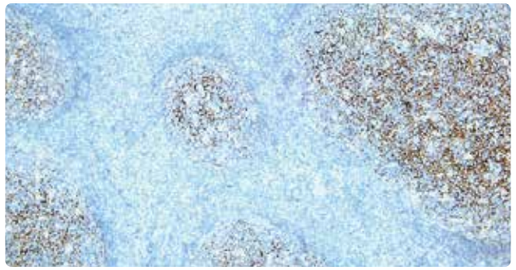


CD21

IVD

- HIER
- Clone EP64
- Membrane
- Cat.No. GT2097

CD21, a complementary receptor of C3d, is expressed on follicular dendritic cells (FDCS) and B lymphocytes. It is mainly used to label B cells and tumors from which they are derived, and can display FDC networks in lymphoid follicles. The visualization of FDC networks can help to understand whether the structure of lymph nodes is disrupted. FDC is positive for sarcoma/tumor. In angioimmunoblastic T-cell lymphoma, FDC network is increased, deformed and surrounding blood vessels, which is one of the important diagnostic indicators.

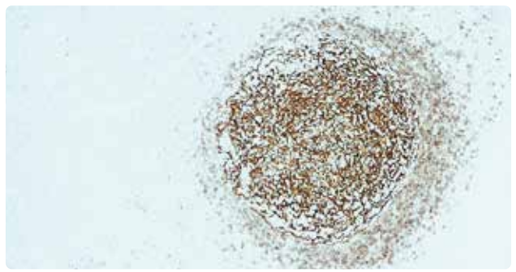


CD23

IVD

- HIER
- Clone EP75
- Membrane
- Cat.No. GT2098

CD23, a low-affinity IgE receptor, is mainly expressed on lymphoid follicular germinal center activated B cells, most low-grade B-cell lymphomas and R-S cells in classical Hodgkin's lymphoma, but not in mantle cell lymphomas. The antibody also marks monocytes and follicular dendritic (FDC) cells.

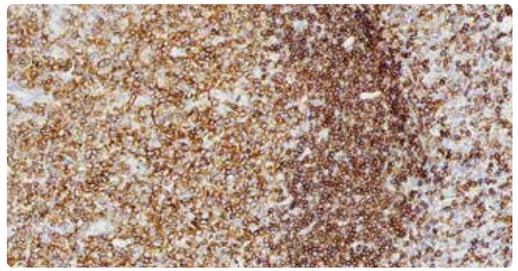


CD22

IVD

- HIER
- Clone GR101
- Membrane/cytoplasm
- Cat.No. GT2324

CD22, a type Ⅰ membrane-integrated glycoprotein, is a B cell adhesion molecule. Cd22 was only expressed on B cells. Immature B cells were cytoplasmic positive, while mature B cells were membrane positive. Hairy cell leukemia and its subtypes showed strong positive expression, while chronic lymphocytic leukemia showed weak positive expression. Some B lymphoblastic leukemia showed cell line-specific cytoplasmic expression. In clinical diagnosis, it can be used to distinguish diffuse large B cell lymphoma (positive) and nodular lymphocytic predominant Hodgkin lymphoma (positive) from classical Hodgkin lymphoma (negative).

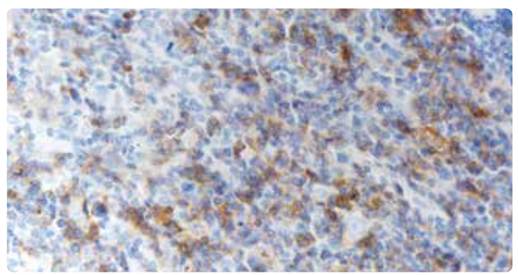


CD25

IVD

- HIER
- Clone GR104
- Membrane
- Cat.No. GT2364

CD25 molecule is the α chain of IL-2 receptor. It alone constitutes a low-affinity receptor, which cannot transmit signals, but plays an important role in the formation of high-affinity receptors. CD25 is mainly distributed in activated T cells, activated B cells, activated monocytes/macrophages and their tumors, including hairy cell leukemia, systemic mastocytosis, adult T cell leukemia/lymphoma, anaplastic large cell lymphoma, etc. It is mainly used in the diagnosis of hairy cell leukemia and systemic mastocytosis.

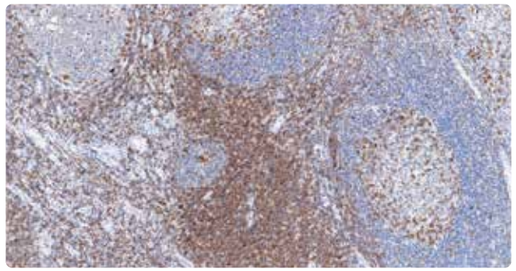


CD27

IVD

- HIER
- Clone GR115
- Membrane
- Cat.No. GT2476

CD27, also known as tumor necrosis factor receptor superfamily member 7 (TNFRSF7), a member of the TNF receptor superfamily, is expressed on naive T cells, memory B cells, NK cells, hematopoietic stem cells and progenitor cells, and is considered as a phenotypic marker of memory B cells. CD27, when combined with its ligands, provides costimulatory signals that promote the activation, differentiation and survival of T cells to generate functional immune responses. It is mainly used in the research of lymphoid tumors.

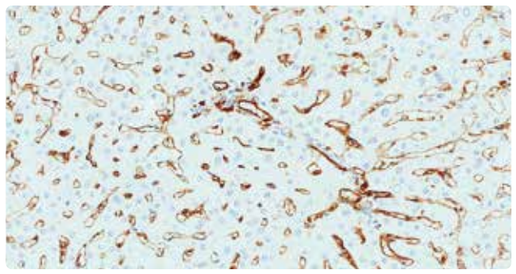


CD31

IVD

- HIER
- Clone GM100
- Membrane/cytoplasm
- Cat.No. GT2321

CD31, also known as platelet endothelial cell adhesion molecule-1 (PECAM-1), is a glycoprotein with a molecular weight of 130KDa. This antibody is commonly used to label endothelial cells, monocytes, granulocytes and some T cells. It is mainly used in the diagnosis and differential diagnosis of benign and malignant vascular tumors.

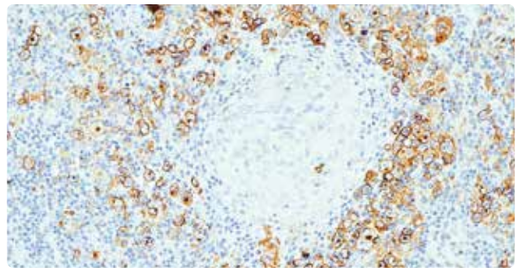


CD30

IVD

- HIER
- Clone JCM182
- Membrane/cytoplasm
- Cat.No. GT2139

CD30 is an activated gene in lymphoma. CD30 was weakly expressed in the following non-lymphoma tissues: activated T and B lymphocytes; EB virus-infected B lymphocytes; T-lymphotropic virus infected T lymphocytes; Diffuse T and B lymphocytes around normal and reactive lymphoid follicles; Macrophages in granulomas formed by tuberculosis, scratch disease, toxoplasma gondii infection and sarcoidosis; The cells of the exocrine part of the pancreas; Neurons in the cerebral cortex; Purkinje cells; Lipoblasts; Myoepithelial cells. Almost all R-S cells in classical Hodgkin's lymphoma expressed CD30, and the staining was characterized by staining of the cell membrane and Golgi apparatus. Large-cell anaplastic lymphoma expressed CD30 on T cells, B cells and null cells, peripheral T cell lymphoma, lymphomatoid papulosis, degenerative atypical histiocytosis, germ cell tumors and hemangiomas, with occasional positive expression in plasma cell lymphoma/myeloma and pancreatic and salivary gland tumors. CD30 expression was rare in leukemia, lymphoma, rhabdomyosarcoma, synovial sarcoma, liposarcoma, giant cell tumor of tendon sheath, malignant fibrous histiocytoma, osteosarcoma, Ewing's sarcoma, malignant Schwannoma, ganglion cell tumor and aggressive fibromatosis. This antibody mainly marked R-S cells in Hodgkin's lymphoma, large cell anaplastic lymphoma and lymphomatoid papulosis.

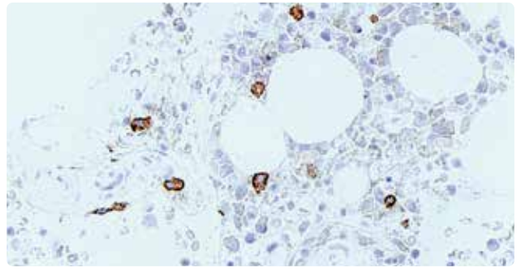


CD33

IVD

- HIER
- Clone EPR24370-124
- Membrane/cytoplasm
- Cat.No. GT2271

CD33 is a myeloid cell differentiation antigen. Cd33 is mainly distributed in myeloid blood cells, especially in the early stages of differentiation. CD33 is expressed in more than 90% of acute myeloid leukemia patients. It is not expressed on the surface of hematopoietic stem cells, nor is it expressed on mature granulocytes and other tissues, making CD33 a good target for myeloid leukemia therapy.

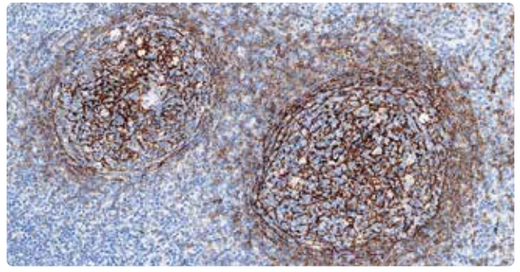


CD35

IVD

- HIER
- Clone EP197
- Membrane
- Cat.No. GT2307

CD35 is a transmembrane protein that can bind to complement C3b and C4b, so it is also called complement receptor 1. CD35 is expressed on all CD20+ B lymphocytes and CD14+ monocytes. It is also expressed on some subsets of T cells (about 5%). It is mainly used in the study of follicular dendritic cells and tumors from which they originate.

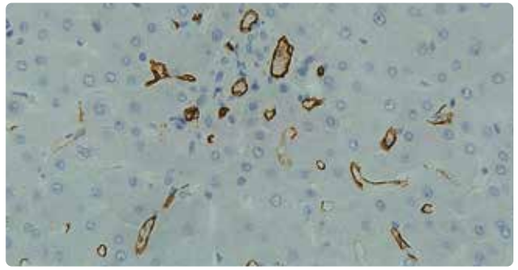


CD34

IVD

- HIER
- Clone QBEnd 10
- Membrane
- Cat.No. GM7165

CD34 is a single-stranded transmembrane glycoprotein encoded by a gene located at 1q32 that is expressed in normal endothelial cells, splenic marginal zone cells, and dendritic stromal cells surrounding blood vessels, nerves, muscle bundles, skin appendage, and breast lobular stroma. CD34 is expressed in vascular tumors, but the specificity and sensitivity of CD34 are lower than those of CD31. CD34 can also be expressed in the following tissues: immature leukemia (including AML, ALL and granulocytic sarcoma), lymphoblastic lymphoma, transforming bone marrow dysplasia, smooth muscle cell tumors and their derived tumors, gastrointestinal stromal tumors, neurilemmoma, lipoma, epithelioid sarcoma and so on. CD34 was rarely expressed in benign and malignant fibrous histiocytoma and fibrosarcoma. Sarcomatoid mesothelioma, synovial sarcoma and fibromatosis did not express CD34. CD34 is mainly used to determine whether there is endothelial differentiation, and it is used in combination with CD117 to identify gastrointestinal stromal tumors. "Distinguishing simple fibrous tumors (usually positive) from sarcomatoid mesothelioma (usually negative), dermatofibrosarcoma protuberans (usually positive) from benign fibrous histiocytoma (usually negative), spindle cell carcinoma of the breast (CD34-) and malignant phyllodes tumor (CD34+)."

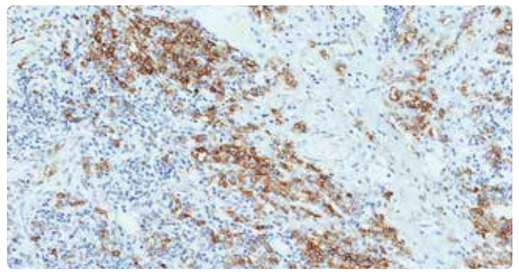


CD38

IVD

- HIER
- Clone SPC32
- Membrane
- Cat.No. GT2129

CD38 is a type II transmembrane glycoprotein. It has a wide cellular and tissue distribution. CD38 is expressed on thymocytes, pre-T and B cells, activated T and B cells, monocytes, most peripheral NK cells, plasma cells (its characteristic marker is CD38+/CD45-, and CD38 is more sensitive than VS38), etc. It can be used for the classification of acute leukemia and the study of the role of activated T cells in autoimmunity and immunodeficiency. It can also be used as a selective marker of germinal center B cells. Cd38-positive B-cell small lymphocytic lymphoma/chronic lymphocytic leukemia has a poor prognosis.

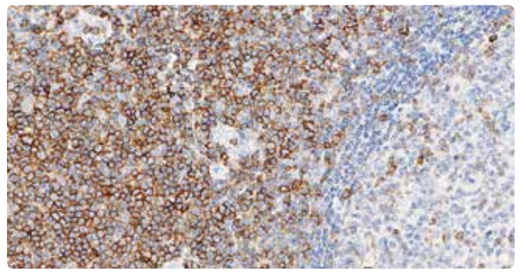


CD43

IVD

- HIER
- Clone DF-T1
- Membrane
- Cat.No. GM0786

CD43 is a transmembrane glycoprotein expressed on the surface of normal and neoplastic T cells. Cd43 marks the vast majority of T-cell lymphomas, but about 30% of B-cell lymphomas are also positive, such as B-cell small lymphocytic lymphoma and mantle cell lymphoma. CD43 is often used in combination with B cell markers for auxiliary diagnosis of T cell lymphoma and classification of B cell lymphoma. CD43 can also be used to label histiocytes and NK cells.

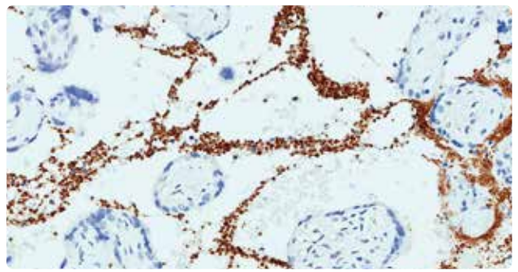


CD42b

IVD

- HIER
- Clone 42C01
- Membrane
- Cat.No. GT2238

CD42b is a surface membrane glycoprotein expressed on the membrane of megakaryocytes and platelets. CD42b can be used to distinguish the subtypes of acute megakaryoblastic leukemia. The expression of CD42b was negative in acute myelofibrosis.

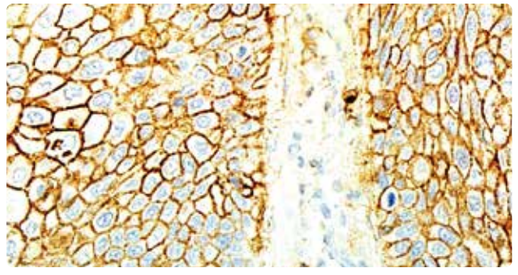


CD44

IVD

- HIER
- Clone DF1485
- Membrane
- Cat.No. GM7082

CD44 belongs to a family of cell adhesion molecules that mediate interactions between cells and extracellular matrix. It is located on the cell surface and can interact with cytoskeletal proteins. It is mainly expressed on the basement membrane of the myoepithelium of some acini and ducts. CD44 is also related to the activation and homing of lymphocytes and tumor invasion. Cd44 is often used in the study of various malignant tumors such as breast cancer, digestive tract tumors and lung cancer.

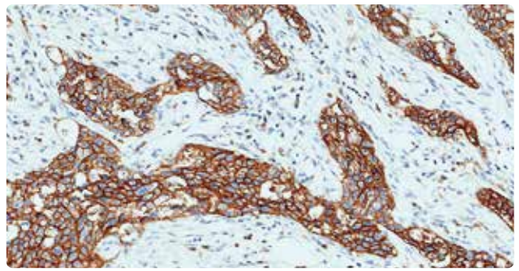


CD44v6

IVD

- HIER
- Clone GM110
- Membrane
- Cat.No. GT2020

CD44v6 is one of the isoforms of CD44 family, which is mainly found in epithelial cells. Studies have shown that the high expression of CD44V6 is related to the invasion of a variety of malignant tumors, while its low expression is related to poorly differentiated adenocarcinoma and squamous cell carcinoma of the lung, poorly differentiated bladder cancer and poorly differentiated prostate cancer. Cd44v6 is mainly used in the study of various epithelial tumors, such as breast cancer, colon cancer and lung cancer.

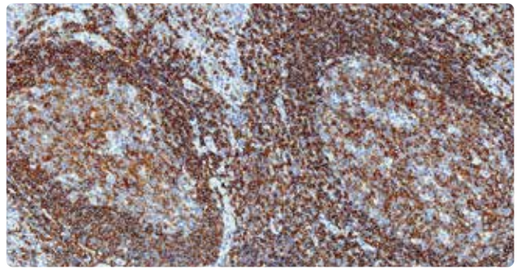


CD45R

IVD

- HIER
- Clone 4KB5
- Membrane
- Cat.No. GM0754

The CD45R family has four differentiated subtypes, CD45RA, CD45RB, CD45RC, and CD45RO. CD45RA is expressed in the vast majority of B-lymphocytes and lymphomas, in some medullary thymocytes, and in 10% of T-lymphocytomas. Combined with other antibodies, CD45RA can be used in the diagnosis and research of B cell lymphoma.

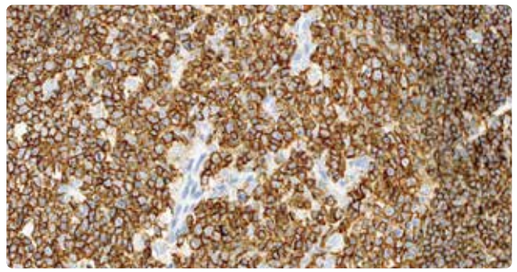


CD45

IVD

- HIER
- Clone 2B11+PD7/26/16
- Membrane
- Cat.No. GM0701

CD45 (leukocyte common antigen, LCA) is a specific marker of hematopoietic cells. It is mainly distributed in all T cells, B cells and NK cells except plasma cells, and also expressed in monocytes, granulocytes and macrophages, but not in mature erythrocytes and megakaryocytes. It is generally not present in non-hematopoietic tissues and is therefore a good marker to distinguish lymphoma or leukemia from non-hematopoietic tumors.

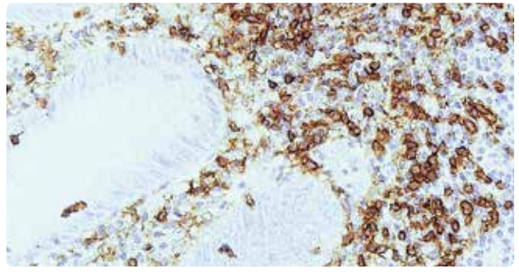


CD45RO

IVD

- /
- Clone UCHL1
- Membrane
- Cat.No. GM0742

CD45RO, one of the isoforms of CD45, has a molecular weight of 180kDa. Cd45ro is expressed on most thymocytes, T cells, granulocytes, mature monocytes and some macrophages. CD45R0 can be used as a marker of reactive T cells and T cell lymphoma to distinguish T cell lymphoma from B cell lymphoma.

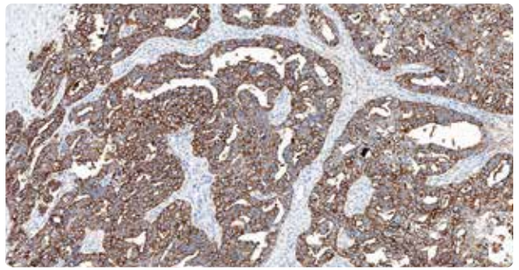


CD47

IVD

- HIER
- Clone GR112
- Membrane
- Cat.No. GT2501

CD47, also known as Integrin-associated protein (IAP), is a transmembrane protein that is widely expressed in normal tissues and a variety of tumor tissues. CD47 has many biological functions, such as self-recognition, immune response regulation, blood cell recognition and tumor immune evasion. Increased expression of CD47 is associated with decreased survival of ovarian, breast, colon, bladder, liver, lung cancer and other cancers. Cd47 can be used as a prognostic marker and a potential immunotherapy target.

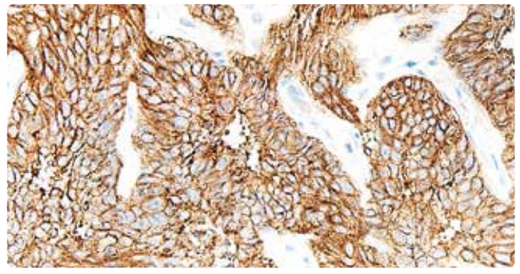


CD56

IVD

- HIER
- Clone 123C3/GM109
- Membrane
- Cat.No. GT2005/GT2530

CD56 is a group of related cell surface glycoproteins that play important roles in embryogenesis and neural cell interaction. It has been reported that CD56-positive carcinomas are more aggressive than CD56-negative carcinomas. CD56 antigen is mainly expressed in neurons, astrocytes, Schwann cells, NK cells and a small proportion of activated T lymphocytes. The antibody is expressed in the following tumors: "These include small cell carcinoma of the lung, mesothelioma, carcinoid, islet cell tumor, pancreatic tumor with neuroendocrine differentiation, Merkel cell carcinoma, hepatocellular carcinoma, some renal cell carcinoma, some ovarian carcinoma, some endometrial carcinoma, thyroid follicular and papillary carcinoma, neuroblastoma, ganglioglioma, oligodendroglioma, retinoblastoma, N. K Large granular lymphocytic leukemia, myeloma, and sinus histiocytes of the liver. CD56 is negatively expressed in the following tumors: nasopharyngeal carcinoma, melanoma, meningioma, colon cancer, follicular central cell lymphoma, hairy cell leukemia, and Ewing sarcoma. This antibody establishes the diagnosis of tumors of neuroectodermal origin and small-cell lung carcinoma.

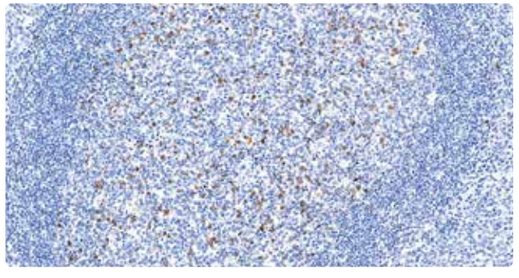


CD57

IVD

- HIER
- Clone NK-1
- Membrane
- Cat.No. GT2011

CD57 is a glycoprotein linked to myelin, which is mainly expressed in NK cells, Schwann cells, oligodendrocytes, gastric chief cells and enterochromaffin cells. This antibody is mainly used in the diagnosis of neuroendocrine tumors and NK-cell tumors, and can also be used in the differential diagnosis of neuroendocrine tumors and neurogenic tumors, malignant schwannoma and MFH and fibrosarcoma, lymphocyte-predominant and lymphocyte-rich classical Hodgkin's lymphoma.

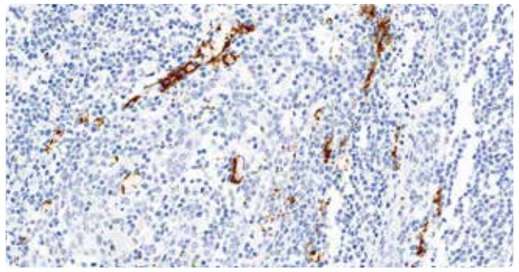


CD61

IVD

- HIER
- Clone 2f2
- Cytoplasm
- Cat.No. GT2141

CD61, also known as integrin beta chain beta 3 (ITGB3), is an integrin cell surface protein associated with cell adhesion and cell surface-mediated signaling. CD61 and CD41 constitute the platelet glycoprotein IIb/IIIb complex, which is involved in blood coagulation and thrombosis. "Cd61 and CD41 are expressed in platelets, megakaryocytes, osteoclasts and vascular endothelial cells." It is mainly used to detect small megakaryocytes in platelets and bone marrow biopsy, and can also be used in the study of megakaryoblastic leukemia. It is sensitive to excessive decalcification and can be used as an internal reference for decalcification degree.

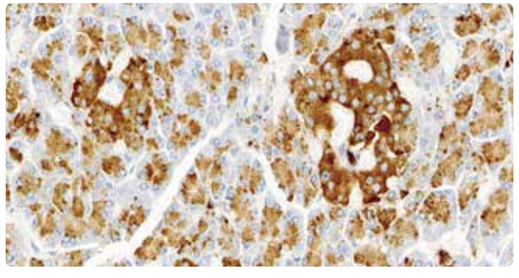


CD63

IVD

- HIER
- Clone NKI/C3
- Membrane/cytoplasm
- Cat.No. GT2142

CD63 is a lysosomal membrane glycoprotein. Cd63 is widely distributed on the surface of various hematopoietic and non-hematopoietic cells, including most sweat glands, pituitary glands, pancreas, prostate, etc. It is highly expressed in monocytes, macrophages and activated platelets. The expression of CD63 is negatively correlated with the invasion and metastasis of malignant melanoma, and CD63 is strongly expressed in the early stage of melanoma, which is used in the study of melanoma.

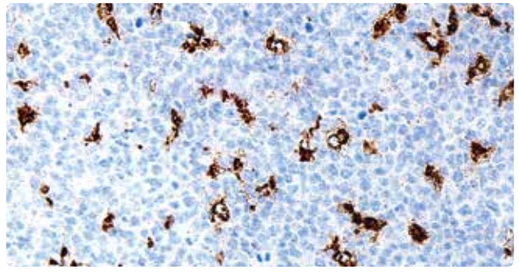


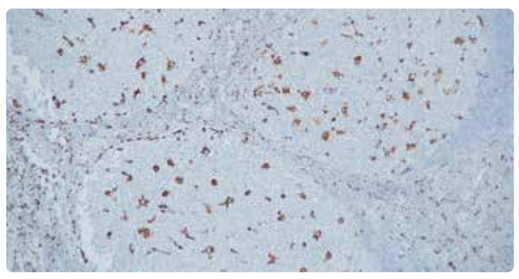
CD68

IVD

- HIER
- Clone KP1/PG-M1
- Cytoplasm
- Cat.No. GM0814/GM0876

CD68, a cytosolic glycoprotein associated with lysosomal granules, is the most reliable marker of macrophages. CD68 is expressed in the following cells: "Monocytes, macrophages, granulocytes (KP1 only, not PG-M1), basophils, large lymphocytes, osteoclasts, mast cells (PG-M1 only, not KP1), synovial cells (PG-M1 only, not KP1), Langerhans' giant cells, dendritic reticulocyte sarcoma, and melanoma." This antibody can be used in the diagnosis of true histiocytic lymphoma, AML, granulocytic sarcoma (but note the weak cytoplasmic positivity in B-cell lymphoma), plasmacytoid monocytes and mastocytosis in Kikucki's disease.



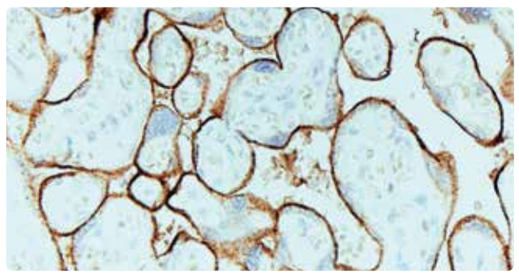


CD71

IVD

- HIER
- Clone 10F11
- Membrane/cytoplasm
- Cat.No. GT2143

CD71 is a cell surface transferrin receptor. The ligand for transferrin is a serum iron transporter. This receptor is widely distributed in cancer cells, sarcoma cells, white blood cells and lymphoma cells. It has been reported that CD71 is expressed in normal tissues and tumor tissues accompanied by cell proliferation, and it plays a role in the clinical warning of many malignant tumors and the corresponding treatment strategy.

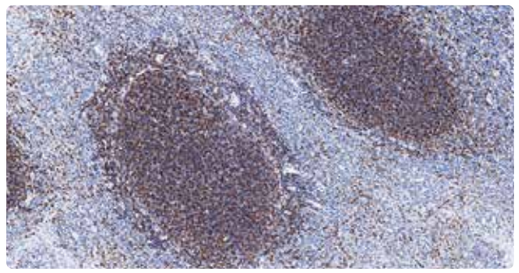


CD79b

IVD

- HIER
- Clone EPER6861
- Membrane
- Cat.No. GT2536

CD79b is a signaling component of B cell receptor (BCR). B-cell antigen receptor complex is the most important molecule on the surface of B cells, which is widely expressed on B cell lymphoma and normal B cells. CD79b is expressed only on normal and malignant B cells, but not on other blood cells, which makes CD79b a highly suitable target antigen for B-cell non-Hodgkin's lymphoma in ADCs.

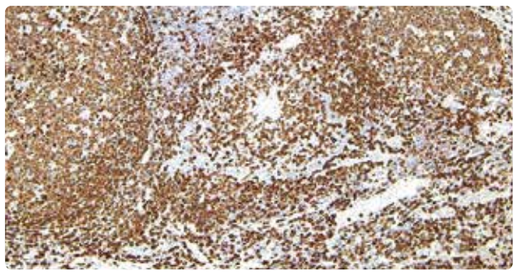


CD79a

IVD

- HIER
- Clone GM101
- Membrane/cytoplasm
- Cat.No. GM7050

CD79a is a broad-spectrum B-cell marker, which can label pre-B cells all the way to plasma cells. About 97% of B-cell lymphomas can be labeled. Cd79a is often used in combination with other antibodies for the diagnosis of B-cell lymphoma.

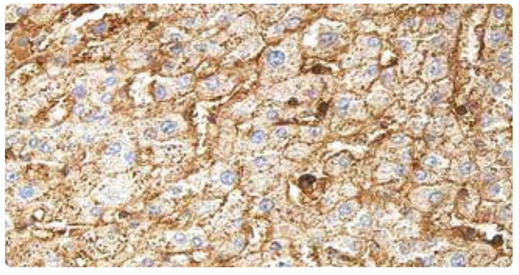


CD99

IVD

- HIER
- Clone EP8
- Membrane/cytoplasm
- Cat.No. GT2123

CD99, also known as p30/32 MIC2, is a 32kDa transmembrane protein encoded by the MIC2 gene. The protein is formed by O-glycosylation of a 28kDa precursor molecule. CD99 is mainly expressed on the membrane of some lymphocytes (bone marrow, lymph node and spleen), thymic cortical cells, ovarian granulosa cells, most Langhan cells, ependymal cells of the central nervous system and Sertoli cells of the testis. This antibody is mainly used in the differential diagnosis of Ewing's sarcoma, primitive neuroectodermal tumor and small round cell tumor in children. It can also be used in the diagnosis of thymic epithelial tumors.

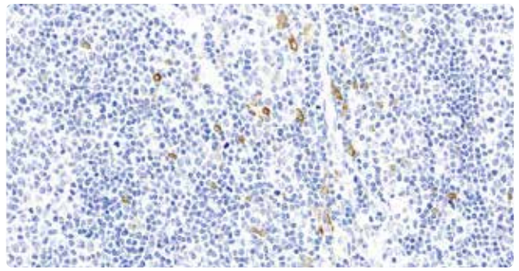


CD103

IVD

- HIER
- Clone EP206
- Membrane/cytoplasm
- Cat.No. GT2430

CD103 is an integrin subunit αE encoded by the ITGAE gene on chromosome 17. CD103 is expressed in almost all cases of hairy cell leukemia (HCL) and is not expressed in most B-cell lymphomas except in splenic marginal zone lymphoma. CD103 is expressed on monocytes in the interfollicular region of the lymph nodes. It is mainly used to label HCL.

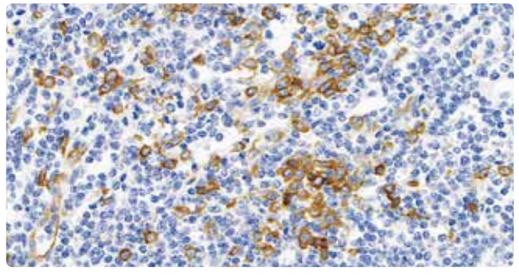


CD123

IVD

- HIER
- Clone BR4MS
- Membrane/cytoplasm
- Cat.No. GT2136

CD123 antigen is also known as the alpha subunit of the human IL-3 receptor. It is a transmembrane glycoprotein and a member of the cytokine receptor superfamily. It forms a heterodimer with CD131, the β-subunit of the human interleukin-3 receptor, to form the interleukin-3 receptor. The α-subunit confers cytokine specificity, whereas the β-subunit confers signal transduction functions. "CD123 is expressed on monocytes, neutrophils, basophils, eosinophils, megakaryocytes, red blood cell precursors, mast cells, macrophages, and a subset of B lymphocytes, and it mediates the proliferation and differentiation of these cells." Cd123 is also expressed in tissue cells outside the hematopoietic system, Leydig cells in the testis, some endothelial cells, cells in the placenta and brain tissue. It is highly expressed in blastic plasmacytoid dendritic cell neoplasm (BPDC), and positive expression can be seen in the hyperplasia of plasmacytoid monocytes/plasmacytoid dendritic cells in Kikuchi's lymphadenitis. It is mainly used in the diagnosis and differential diagnosis of BPDC.

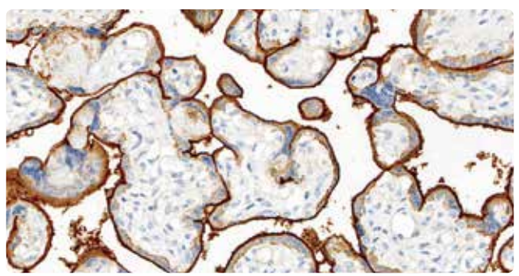


CD105

IVD

- HIER
- Clone GM102
- Membrane
- Cat.No. GT2328

CD105 is a type I transmembrane protein highly expressed in human vascular endothelial cells and widely distributed in many human tissues. This antibody is mainly used in the study of angiogenesis in the stroma of various malignant tumors. In vascular tumor cells and proliferating cells, CD105 expression is upregulated. CD105 is an endothelial cell marker associated with proliferation.

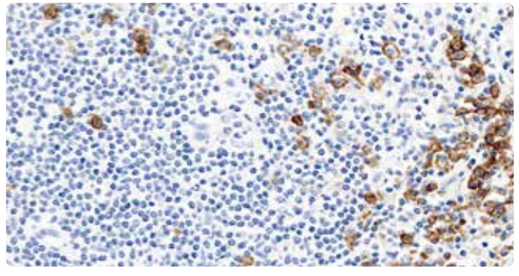


CD138

IVD

- HIER
- Clone GR106
- Membrane
- Cat.No. GT2451

CD138 is a transmembrane glycoprotein expressed in normal lymphocytes at different stages of differentiation, such as B cells, immature B cells and plasma cells. Cd138 is also expressed on the basement membrane of epithelial cells, embryonic stromal cells, vascular smooth muscle cells, endothelial cells and nerve cells. In some tumors, such as squamous cell carcinoma, the expression of CD138 is associated with tumor progression and prognosis.

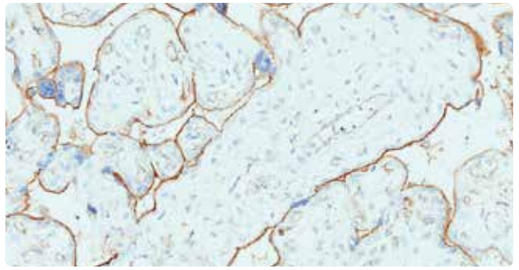


CD141(TM)

IVD

- HIER
- Clone PBS-01
- Membrane
- Cat.No. GT2088

CD141, also known as thrombomodulin (TM) and BDCA-3, is an endothelial cell surface receptor. CD141 antigen is expressed on neutrophils, monocytes, and platelets. CD141 is expressed at high levels in a small subset of myeloid dendritic cells that display monocytic morphology, which can regulate T cells and influence immune responses. CD141 was expressed in cytoplasmic granules in lung adenocarcinomas, as well as in squamous cell carcinomas, urothelial carcinomas, synovial sarcomas, and thymic epithelial tumors.

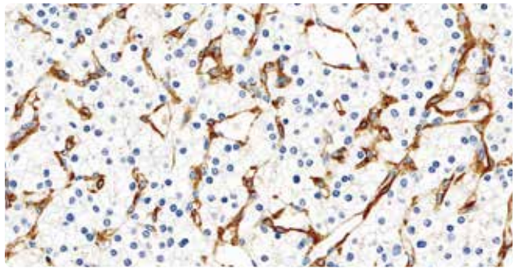


CD146

IVD

- HIER
- Clone EP54
- Membrane/cytoplasm
- Cat.No. GT2346

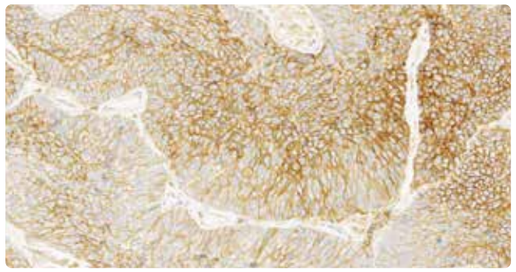
CD146, a single-chain transmembrane glycoprotein, is a Ca2+ -independent cell adhesion molecule that mediates cell-cell and cell-matrix interactions. Cd146 is expressed in various human endothelial cells and participates in tumor angiogenesis and metastasis. Cd146 was first identified in malignant melanoma, but not expressed in normal melanocytes. In addition, CD146 is also widely expressed in a variety of tissues and tumors. Cd146 can be used for the diagnosis of gestational trophoblastic disease in combination with other antibodies in transitional trophoblastic cells expressed in normal placenta, placenta accreta and enlarged placenta.



CD147

- HIER
- Clone GM103
- Membrane
- Cat.No. GT2334

CD147 stimulates the secretion of matrix metalloproteinases by fibroblasts surrounding tumor cells, and also acts on peripheral vascular endothelial cells through paracrine, which is related to tumor invasion and metastasis. The expression of CD147 increased with the malignant degree of tumor. In cervical cancer, it is not expressed in paracancerous cells, but expressed in cancer cells, which can be used as an indicator of poor prognosis of various tumors.

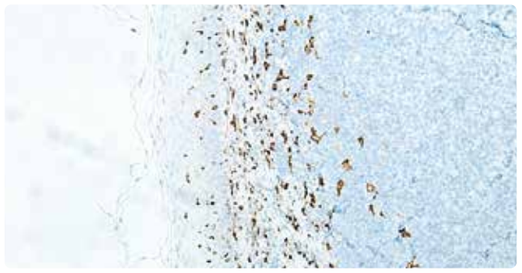


CD163

IVD

- HIER
- Clone 10D6
- Membrane
- Cat.No. GT2077

CD163 is a type I membrane protein, also known as M130 antigen, Ber-Mac3, Ki-M8 or SM4. Cd163 was mainly expressed in the mononuclear/macrophage system, but was not expressed in the germinal center and mantle of lymphoid follicles. As a new histiocytic marker, this antibody is mainly used in the diagnosis and research of monocytes, macrophages and their tumors. In addition, CD163 is of great significance in the diagnosis of FDC sarcoma. If CD163 is positive, FDC sarcoma can be excluded.

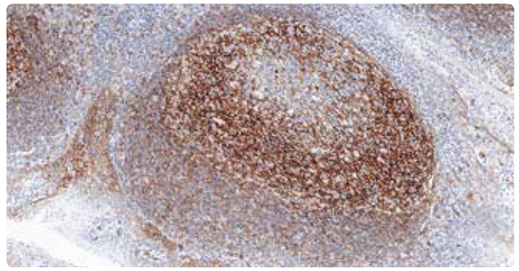


CD200

IVD

- HIER
- Clone EPR22412-229
- Membrane
- Cat.No. GT2478

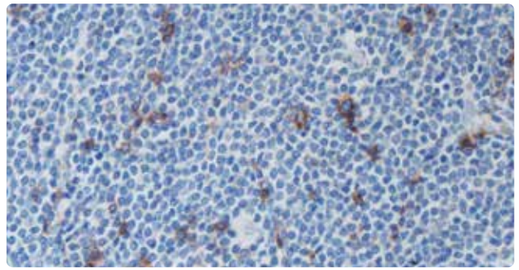
CD200 (OX-2 membrane glycoprotein) alias OX2. It is an immune adhesin that can release immunosuppressive signals and regulate autoimmunity. CD200 is expressed on a variety of cells, including B cells, some T cells (including activated T cells), thymocytes, endothelial cells, and neurons. Cd200 can be used in the differential diagnosis of B small lymphocytic lymphoma from other small B cell tumors.



CD247

- HIER
- Clone GM105
- Membrane
- Cat.No. GT2442

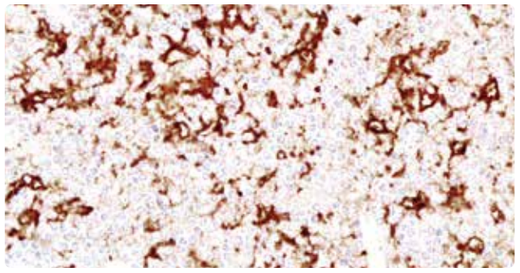
CD247, also known as CD3 Zeta, plays an important role in chronic inflammation, autoimmune diseases, and tumor development. Changes in the expression and function of CD247 are related to abnormal activation of T lymphocytes. The reduction of CD247 gene expression level leads to abnormal TCR signal transduction and intracellular signal transduction, which leads to abnormal activation of T lymphocytes, and then causes the loss of immune function, leading to the occurrence of chronic infection, immune diseases and tumors. The abnormal expression of CD247 in immune system diseases and tumor tissues can be used for disease monitoring, efficacy evaluation, prognosis and recurrence prediction.



CD205

- HIER
- Clone EP176
- Cytoplasm
- Cat.No. GT2276

CD205, also known as DEC-205, belongs to the C-type lectin-mediated endocytosis receptor in the mannose receptor family of macrophages. CD205 is mainly expressed in thymic cortical epithelial cells and dendritic cells, with low levels of expression in T cells, B cells and some epithelial cells. CD205 is a newly discovered thymic epithelial marker, which is related to the positive selection process of thymocytes. It is a sensitive and specific marker for the diagnosis of thymoma, but its sensitivity is slightly lower than that of CD5 and CD117.

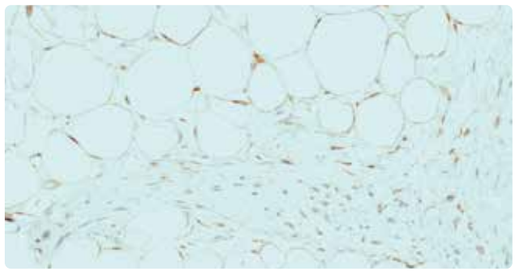


CDK4

IVD

- HIER
- Clone EP180
- Cytoplasm/nucleus
- Cat.No. GT2244

CDK4 is a cell cycle-dependent kinase that acts as a regulatory center for the G1-S phase of the cell cycle. CDK4 is expressed continuously throughout the cell cycle. Phosphorylation of CDK4 is a downstream event of stimulatory or inhibitory cytokine signaling, which promotes the transition of cells to G1-S phase and cell proliferation. It is the detection point of mid-G1 phase, and CDK4 protein expression peaks in mid-late G1. In the process of cell cycle abnormality, CDK4 is most closely related to cell carcinogenesis. Cdk4 is overexpressed in many tumors, such as oral squamous cell carcinoma, esophageal squamous cell carcinoma, islet cell carcinoma, lung cancer, breast cancer and colon cancer. It is used in combination with MDM2 for the diagnosis of liposarcoma and spindle cell sarcoma.



CDK12

IVD

- HIER
- Clone GR023
- Nucleus
- Cat.No. GT2577

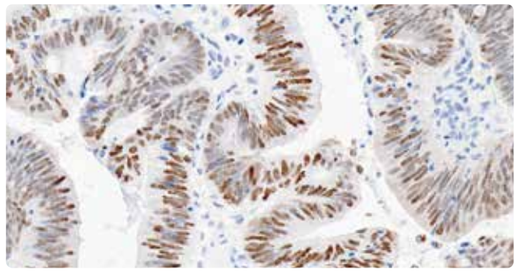
Cyclin-dependent kinase 12 (CDK12) belongs to the serine/threonine protein kinase family and has pleiotropic effects on regulating gene transcription, RNA splicing and translation, cell cycle progression, DNA damage response and maintaining genome stability. CDK12 has mutations and abnormal expression in a variety of malignant tumors, such as ovarian cancer, prostate cancer, breast cancer, esophageal cancer, endometrial cancer, bladder cancer, gastric cancer, colorectal cancer and pancreatic cancer, which is expected to become a new target for tumor treatment.

CDX-2

IVD

- HIER
- Clone EP25
- Nucleus
- Cat.No. GT2019

Retinoblastoma gene protein (Rb) is a tumor suppressor gene. Rb protein is a phosphoprotein located in the nucleus. Phosphorylation and dephosphorylation of Rb protein are the main forms of Rb protein regulating cell proliferation and differentiation. The dephosphorylated Rb protein binds to the transcription factor E2F, leaving E2F in an inactive state and inhibiting the cell transition from G1 to S phase. The abnormal expression of Rb protein is closely related to the occurrence of some tumors, such as retinoblastoma, breast cancer, esophageal cancer, prostate cancer, small cell lung cancer and so on.

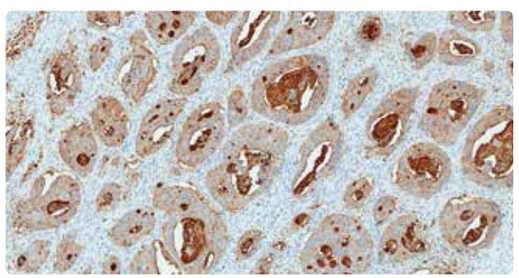


CEA

IVD

- HIER
- Clone poly/COL-1
- Cytoplasm/cavity membrane
- Cat.No. GT2209/GT2108

CEA is an embryonic cancer antigen that is normally present in the fetal digestive tract epithelium, pancreas, and liver. Cea is widely expressed in various glandular epithelial tumors, especially in gastrointestinal epithelial tumors. Most gastrointestinal malignant tumors, pancreatic cancer and lung adenocarcinoma have positive expression. CEA staining was found at the inner margin of the lumen of normal tissue and throughout the cytoplasm in the case of carcinoma. However, because the polyclonal CEA (pCEA) antibody cross-reacts with bile glycoprotein 1 (BGL-1) of the bile duct capillaries of hepatocytes, the tumors of hepatocellular origin show a unique peritubular staining pattern.

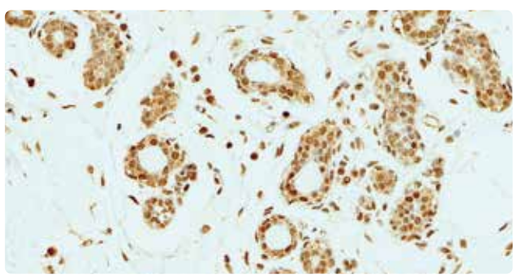


C-Fos

IVD

- HIER
- Clone GR207
- Cytoplasm/nucleus
- Cat.No. GT2448

C-fos is a nuclear phosphoprotein that can form a heterodimer with C-jun to form a transcription factor complex AP-1. The complex can specifically bind to the promoters/enhancers of multiple target genes and regulate the expression of target genes. C-fos plays an important role in signal transduction, cell proliferation and differentiation. C-fos is hardly or weakly expressed in normal tissues (skin), overexpressed in a variety of tumor cells, and can also be used as a marker of neuronal activity. At present, C-fos is mainly used in the research of various malignant tumors such as esophageal cancer, nasopharyngeal cancer, breast cancer, colon cancer and related encephalopathy.

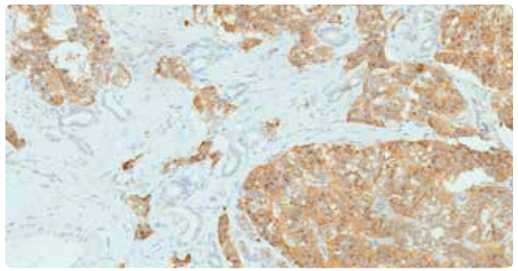


Chromogranin A

IVD

- HIER
- Clone GM306/LK2H10
- Cytoplasm
- Cat.No. GT2114/GT2533

Chromogranin A (CgA) is A group of soluble acidic cellular proteins that are not only present in the secretory granules of neuroendocrine cells, but also widely distributed in all endocrine cells containing secretory granules and tumor cells derived from neuroendocrine cells. This antibody can recognize the carboxy-terminal fragment of chromogranin antigen, but not the amino-terminal fragment. It is expressed in medullary thyroid carcinoma, parathyroid tumor, paraganglioma, fecal carcinoma and other neuroendocrine tumors. It is mainly used to mark neuroendocrine cells and tumors from which they originate, and can be used as a differential diagnosis between medullary thyroid carcinoma and follicular thyroid carcinoma.

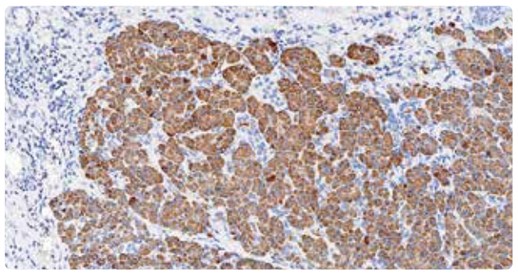


Chymotrypsin

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2559

Human Chymotrypsin C (CTRC) is a digestive serine protease synthesized by pancreatic acinar cells and secreted by pancreatic ductal cells, which is activated in the duodenum. Its main role is to regulate the balance of trypsin activation and degradation, and protect the pancreatic tissue structure from the destruction of excessive activation of trypsin. CTRC gene mutation can increase the risk of chronic pancreatitis. The down-regulation or even loss of CTRC expression may be related to the occurrence and metastasis of pancreatic cancer. Therefore, CTRC can assist in the differential diagnosis of pancreatic cancer, and can also be used for the study of pancreatic intraepithelial neoplasia and pancreatic ductal adenocarcinoma.



CK(34ßE12)

IVD

- HIER
- Clone 34ßE12
- Cytoplasm
- Cat.No. GM0630

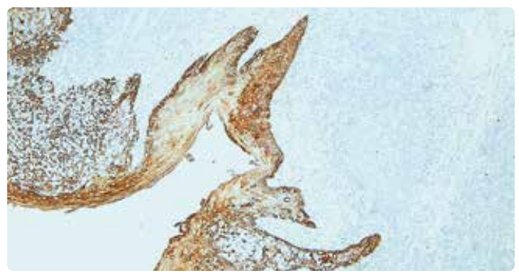
CK,HMW are hybrid polymeric cytokeratins. It mainly marks squamous epithelial cells, ductal epithelial cells, and other stratified epithelial cells. It is used in conjunction with CK-LMW to distinguish squamous cells from non-squamous cells and to determine or exclude tumors of epithelial origin. It is a specific marker antibody for prostate basal cells and is used in combination with P504S and p63 for the diagnosis of prostate cancer. It can also distinguish urothelial dysplasia (positive for basal cells only) from carcinoma in situ (positive for the full layer of epithelium), ductal carcinoma in situ (negative or weakly positive) and lobular carcinoma in situ (positive). Mixed high molecular keratins include; CK1, CK5, CK10, and CK14.

CK (AE1)

IVD

- HIER
- Clone AE1
- Cytoplasm
- Cat.No. GT2079

CK (Cytokeratin, cytokeratin) This antibody clone number is AE1 and labels most acidic keratins (including CK10, CK14, CK15, CK16, and CK19). It did not cross-react with filamentous proteins such as vimentin, desmin, glial fibrillary acidic protein and neurofilament protein. It is used to label squamous epithelium and simple epithelium including glandular epithelium.

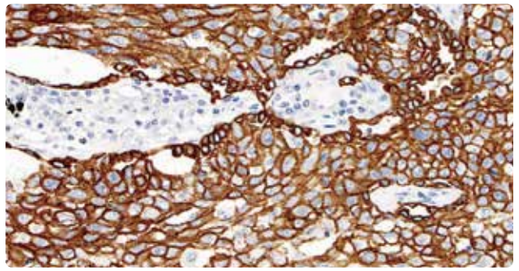


CK (AE1/AE3)

IVD

- LIER
- Clone AE1/3
- Cytoplasm
- Cat.No. GM3515

"CK, pan (Cytokeratin Pan) This antibody reacts with almost all epithelia (except adrenal, hepatocellular tumors, seminomas, some renal cell tumors, some carcinoids, and islet cells) and does not cross-react with some intermediate filamentous proteins." "It can be used in the diagnosis of squamous cell tumors (including spindle cell variants), adenocarcinoma, transitional cell carcinoma, small cell carcinoma, carcinoid, pleomorphic adenoma (epithelial component), thymoma, mesothelioma (including sarcomatoid component), chordoma, germ cell tumors (except seminoma), synovial sarcoma and epithelioid sarcoma." "AE1 reacts with most acidic cytokeratins (type I), whereas AE3 recognizes all known basic cytokeratins (type II)." "A mixture of AE1 / AE3 antibodies, including CK1-8, 10, 14, 15, 16, 19."

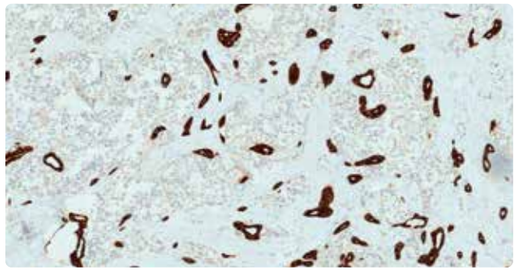


CK (Pan)

IVD

- LIER
- Clone GR314
- Cytoplasm
- Cat.No. GT2322

"CK, pan (Cytokeratin Pan) This antibody reacts with almost all epithelia (except adrenal, hepatocellular tumors, seminomas, some renal cell tumors, some carcinoids, and islet cells) and does not cross-react with some intermediate filamentous proteins." "It can be used in the diagnosis of squamous cell tumors (including spindle cell variants), adenocarcinoma, transitional cell carcinoma, small cell carcinoma, carcinoid, pleomorphic adenoma (epithelial component), thymoma, mesothelioma (including sarcomatoid component), chordoma, germ cell tumors (except seminoma), synovial sarcoma and epithelioid sarcoma."

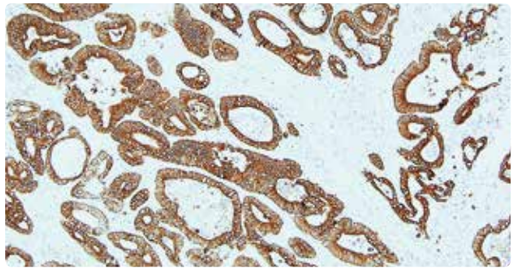


CK (CAM5.2)

IVD

- HIER
- Clone CAM5.2
- Cytoplasm
- Cat.No. GT2091

CAM5.2, also known as very low molecular weight keratin, can recognize human cytokeratins of 48KDa and 52KDa, corresponding to CK7 and CK8 classified by Moll, but react relatively weakly with CK7. Normal secretory epithelium is positive for Cam5.2, often in combination with CK18. Stratified squamous cells and urothelium did not express CAM5.2. CAM5.2 is widely used in squamous and non-urothelial epithelial tumors, and can distinguish squamous cell carcinoma from adenocarcinoma. However, CAM5.2 is also expressed in some poorly differentiated squamous cell carcinomas, and it is often used in combination with p40. CAM5.2 is highly expressed in extrarenal malignant rhabdoid tumors and small cell neuroendocrine carcinomas. The invasive or exophytic pituitary adenomas in the nasal cavity and sinuses showed focal or diffuse expression of CAM5.2. Positive cam5.2 was also observed in olfactory neuroblastoma and EWS/PNET (Ewing sarcoma/primitive neuroectodermal tumor).

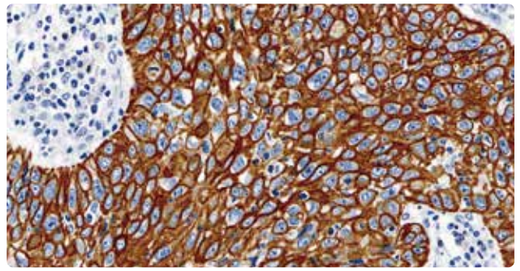


CK5

IVD

- LIER
- Clone GR301
- Cytoplasm
- Cat.No. GT2152

CK5 is a cytokeratin protein. In normal tissues, CK5 is expressed in the squamous epithelium, in the germinal layer cells of some squamous epithelium, in the basal cells of ductal epithelium, in myoepithelial cells, and in mesothelial cells. The expression of CK5 is positive in squamous cell carcinoma, but sometimes it is focally positive in lung adenocarcinoma. It can be used in combination with p40 in the diagnosis of lung squamous cell carcinoma. Epithelioid mesothelioma was strongly positive, and metastatic lesions were also positive. It was also positive in large cell carcinoma and basal cell carcinoma of the lung and could be used in combination with CK14. Like CK5/6, it can be used to label breast myoepithelial cells and prostate basal cells.

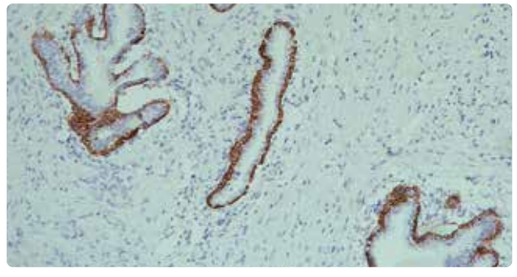


CK5/6

IVD

- HIER
- Clone EP24&EP67/RM341
- Cytoplasm
- Cat.No. GM7237/GT2438

CK5/6 was positive in basal cells of squamous and ductal epithelium and some basal cells, myoepithelial cells and mesothelial cells of squamous epithelium in normal tissues. Glandular epithelial cells were negative. It is highly expressed in epithelioid mesothelial tumors, but rarely expressed in glandular tumors. It can be used in the differential diagnosis of squamous cell carcinoma and adenocarcinoma, mesothelioma and adenocarcinoma. It can also be used to differentiate benign from malignant ductal epithelial hyperplasia.

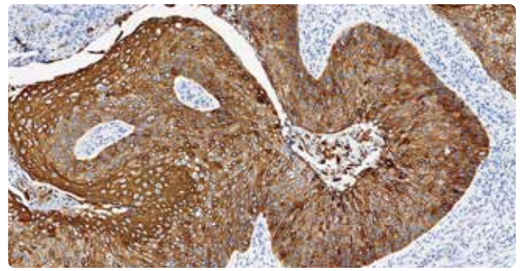


CK6

IVD

- HIER
- Clone GR316
- Cytoplasm
- Cat.No. GT2490

Cytokeratin 6 (CK6), an epithelial-specific type II keratin, is commonly associated with keratinocyte activation after trauma, and thus is also considered a class of healing factors. CK6 is always found in pairs with the type I keratins CK16 and/or CK17 and is usually expressed in the basal cells of non-keratinized epithelial tissues, such as oral mucosa, esophagus, tongue papilla, and is also prominently expressed in the outer root sheath of hair follicles. In tumor tissues, CK6 was expressed in most SCC, especially in the middle mature cell layer of the SCC nests. CK6 is usually used in combination with CK5 in the differential diagnosis of squamous cell carcinoma and adenocarcinoma, mesothelioma and adenocarcinoma, and can also be used in the differential diagnosis of ductal epithelial malignant hyperplasia.

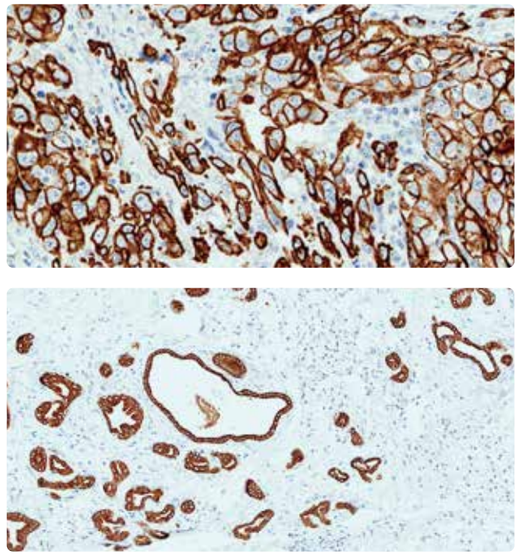


CK7

IVD

- HIER
- Clone OV-TL12/30/ GM303
- Cytoplasm
- Cat.No. GM7018/GT2446

CK7 is a basic cytokeratin with a molecular weight of 54kDa that is present in glandular and transitional epithelial cells of most normal tissues and is generally absent in cells of non-epithelial origin. The expression of CK7 was positive in ovarian serous and endometrioid adenocarcinomas, breast adenocarcinomas and lung adenocarcinomas, but negative in gastrointestinal and ovarian mucinous adenocarcinomas. In addition, it was also positive in cervical tumor, cholangiocarcinoma and transitional cell carcinoma of bladder. It was negative in squamous cell carcinoma, hepatocellular and hepatocellular carcinoma, prostate and parathyroid carcinoma, and renal epithelial tumor. Diagnostic significance: CK7 is generally considered to be a relatively specific marker of adenocarcinoma and transitional epithelial cell carcinoma. The combined application of CK7 and Villin may help to determine the primary site of adenocarcinoma. It can be used in the differential diagnosis of renal cell carcinoma, chromophobe cell carcinoma and eosinophilic cell carcinoma.



CK8

IVD

- HIER
- Clone TS1
- Cytoplasm
- Cat.No. GT2035

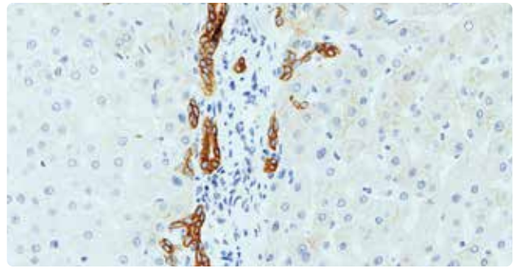
CK8 is a low molecular weight keratin that marks a variety of normal and neoplastic gonadal epithelia. Ck8 is expressed in adenocarcinomas and most cases of non-keratinizing squamous cell carcinomas, but not in keratinizing squamous cell carcinomas.

CK8/18

IVD

- HIER
- Clone 5D3
- Cytoplasm
- Cat.No. GT2078

CK8&18, as first-line markers of glandular epithelium, is used to label a variety of monolayer epithelium, especially various glandular epithelium, and is not expressed in normal keratinized/nonkeratinized squamous epithelium. CK8&18 is mainly expressed in adenocarcinoma, but not in keratinizing squamous cell carcinoma. Ck8 &18 is often used in combination with CK5&6 in the differentiation of glandular from squamous cell carcinoma. However, it should be noted that in the malignant transformation of non-keratinizing stratified squamous epithelium, the expression of CK8&18 has a gradual upward trend. The worse the differentiation, the higher the expression rate, and the worse the prognosis. The lower expression of CK8&18 in breast cancer, colorectal cancer and other adenocarcinomas is associated with poor tumor progression and prognosis.

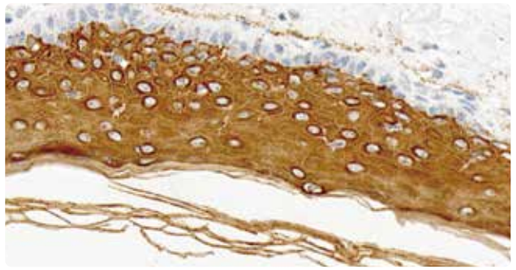


CK10

IVD

- HIER
- Clone DE-K10
- Cytoplasm
- Cat.No. GT2147

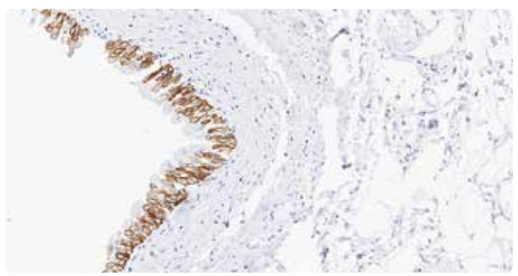
CK10 is a type Ⅰ cytokeratin with a molecular weight of 56.5kD and is expressed in the cells above the basal layer of stratified epithelium and keratinized epithelium. The expression of CK10 is associated with the maturation of malignant keratinocytes, suggesting bullous congenital ichthyosis-like erythroderma, epidermolytic hyperkeratosis and diffuse non-epidermolytic palmoplantar keratosis. Ck10 is also helpful in the diagnosis of squamous cell carcinoma.



CK13

- HIER
- Clone GR322
- Cytoplasm
- Cat.No. GT2499

Cytokeratin 13 (CK13) is a type I acidic low molecular weight cytokeratin that forms heterotetramers with type I CK4 and forms intermediate filaments that shape the cytoskeleton of specific epithelial cells. CK13 is mainly expressed in the basal layers of nonkeratinizing stratified epithelium, such as squamous epithelium of the esophagus, larynx, tonsil, cervix, and urethral epithelium, and is a marker of mature but unkeratinized squamous epithelium. In tumor tissues, the expression of CK13 is related to the degree of malignancy and progression of the tumor. For example, CK13 expression is decreased in high-grade urothelial carcinoma.

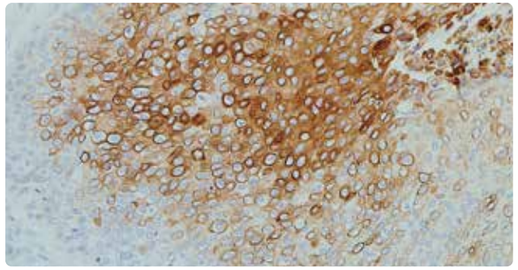


CK10/13

IVD

- HIER
- Clone DE-K13
- Cytoplasm
- Cat.No. GT2341

CK10&13 recognizes cytokeratins of 56.5kDa (CK10) and 53kDa (CK13) and can be used as the preferred markers for stratified squamous epithelium and tumors of their origin. CK10 is expressed in the basal layer of keratinized stratified squamous epithelium, while CK13 is a marker of terminal differentiation of non-keratinized stratified squamous epithelium. Ck10 and CK13 are highly expressed in well-differentiated tumors. The expression of CK10 and CK13 is often associated with the occurrence, differentiation and morphological changes of epithelial cells. Ck10 and CK13 can be used to study the occurrence, development, metastasis and prognosis of stratified squamous epithelial tumors.

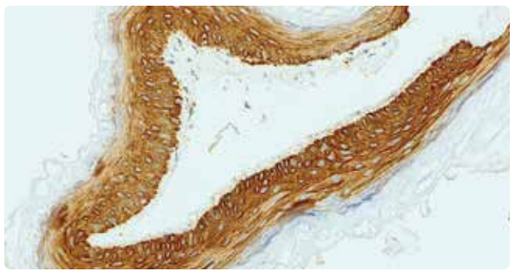


CK14

IVD

- HIER
- Clone LL002
- Cytoplasm
- Cat.No. GT2151

CK14 is a 50-kda cytokeratin expressed in the basal cells of myoepithelium and keratinized squamous epithelium. It can be used for the diagnosis of squamous cell carcinoma, especially poorly differentiated squamous cell carcinoma, and p63 and CK5/6 can be detected together. Oncocytic tumors at multiple anatomic sites express CK14 and can be differentiated from adenocarcinoma. Ck14 can also be used to distinguish invasive ductal carcinoma from intraductal carcinoma of salivary glands.

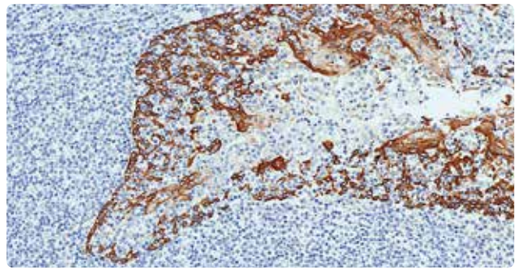


CK16

IVD

- HIER
- Clone GR311
- Cytoplasm
- Cat.No. GT2228

CK6 and 16, which are usually found in pairs, are expressed in the superbasal layer of keratinocytes, which undergo rapid cell cycles and are also referred to as proliferation-associated keratins. CK16 is not expressed in normal breast tissue or in non-invasive breast cancer. Only 10% of invasive breast cancers show diffuse and focal positive expression. Proliferation-associated keratin has been reported to have a high correlation with carcinoma of basal cell origin and no correlation with the proliferation marker Ki-67. This indicates that basal cells of breast cancer are not highly proliferative even if they are negative for Ki-67 staining.

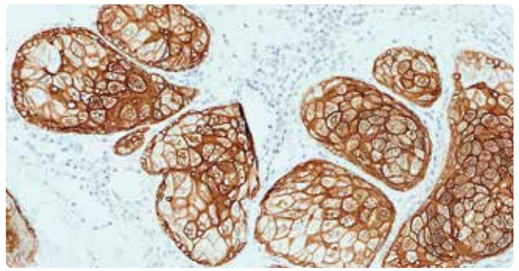


CK17

IVD

- HIER
- Clone EP98
- Cytoplasm
- Cat.No. GM7046

CK17 is a type Ⅰ keratin with a molecular weight of 46kDa. Ck17 is expressed in normal tissues in human epithelial appendages such as hair follicles and nail beds; The bronchial epithelial basal cells were positive. It is also expressed in myoepithelial cells of various glands such as the mammary gland, sweat, and saliva. It is a good indicator of squamous cell carcinoma in various tissues such as cervix, lung, and mouth, and is also associated with pachyonychia congenita 2. Positive expression of CK17 in breast cancer is associated with poor prognosis, high tumor grade and axillary lymph node metastasis.

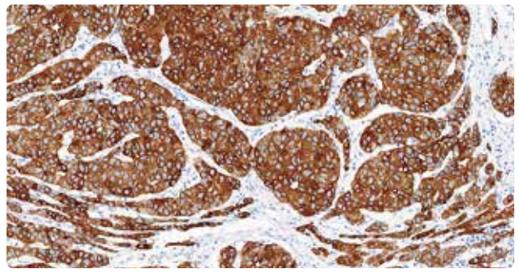


CK18

IVD

- HIER
- Clone DC-10
- Cytoplasm
- Cat.No. GT2029

CK18 was widely expressed in simple and pseudostratified epithelium, but was usually negative in stratified squamous epithelium. It is often used to determine whether a tumor, including metastatic cancer, is of unilaminal epithelial origin.

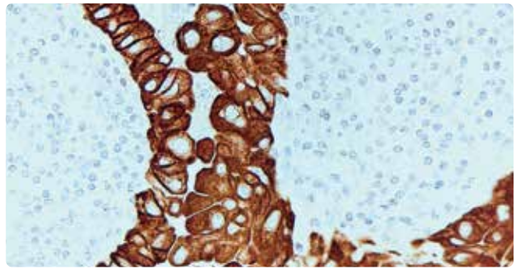


CK19

IVD

- HIER
- Clone RCK108
- Cytoplasm
- Cat.No. GM0888

CK19 is a low molecular weight keratin that can label a variety of normal and neoplastic gonadal epithelia and is not expressed in hepatocytes. CK19, which is used to differentiate hepatocellular carcinoma from cholangiocarcinoma.

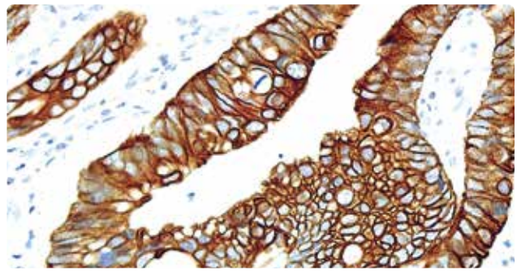


CK20

IVD

- HIER
- Clone Ks20.8
- Cytoplasm
- Cat.No. GT2042

CK20 is present in normal gastrointestinal epithelium, transitional epithelium and Merkel cells. Ck20 was positive in gastrointestinal carcinoma, Merkel cell carcinoma, pancreatic and cholangiocarcinoma, salivary gland small cell carcinoma, small intestinal carcinoid and ovarian mucinous adenocarcinoma. However, it was negative in breast adenocarcinoma, endometrial carcinoma, lung adenocarcinoma and squamous cell carcinoma, small cell tumors other than salivary gland and Merkel cell tumors, non-mucinous ovarian tumors, renal cell carcinoma, seminoma, thymoma and neuroendocrine tumors. The expression of this antibody was consistent in primary carcinoma and lymph node metastasis. It is often used in combination with CK7 and Villin as an indicator of the primary site of cancer. It is of great significance to judge the origin of small cell tumors.

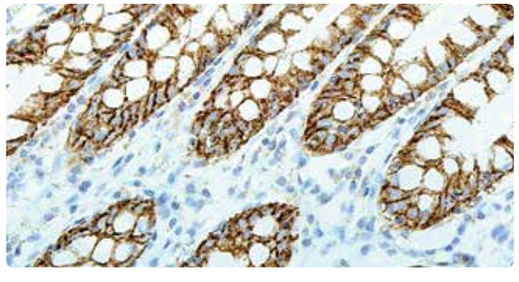


Claudin-1

IVD

- HIER
- Clone poly
- Membrane/cytoplasm/nucleus
- Cat.No. GT2211

Claudin-1 is a tight junction protein, which is highly expressed in epithelial cells and peripheral nerves, low or no expression in breast cancer, breast cancer cell lines and malignant glioma, and increased expression in colon cancer. The positive expression of Claudin-1 was also observed in peripheral neuromas, dermatofibrosarcoma protuberans, low-grade fibromyxoid sarcoma, sclerosing fibroblastoma, fibromatosis, neurofibroma and schwannoma. Claudin-1 combined with EMA (positive) and S-100 (negative) can be used for the diagnosis of peripheral neuromas.

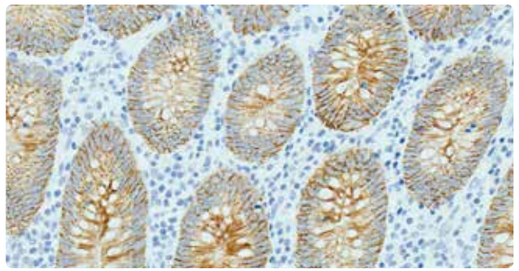


Claudin-4

IVD

- HIER
- Clone GM104
- Membrane
- Cat.No. GT2339

Claudin-4, a tight junction protein, is one of the key proteins that affect the function of tight junctions between cells. It is overexpressed in pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, bladder cancer, and endometrial cancer.

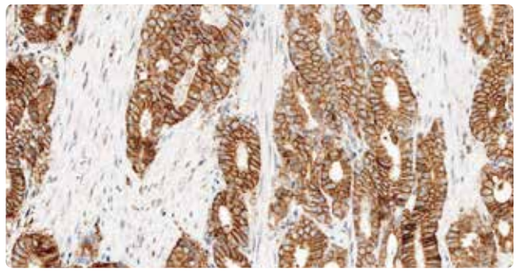


Claudin-7

IVD

- HIER
- Clone EPR18073
- Membrane/cytoplasm
- Cat.No. GT2447

Claudin7 is one of the important members of the tight junction protein Claudins family, which plays an important role in maintaining cell polarity and tight junction between cells. Claudin7 is mainly distributed in the intestine, stomach, lung, bladder, skin and kidney, and its abnormal expression can cause normal structural damage or physiological dysfunction of tight junction molecules. The differential expression of Claudin7 protein can be observed in different types of malignant tumors, including colorectal cancer, lung cancer, breast cancer, etc. Current studies have shown that the low expression of Claudin7 can promote the occurrence of colorectal cancer, is related to the invasion and metastasis of colorectal cancer, and affects the prognosis of patients. The lower the expression of Claudin7, the worse the differentiation of tumor tissue. Claudin7 may be a potential marker for early diagnosis, treatment and prognosis of colorectal cancer.

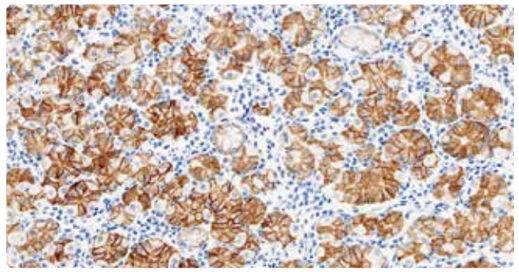


Claudin18.2

IVD

- HIER
- Clone RM510
- Membrane
- Cat.No. GT2441

Claudin 18.2 belongs to the tight junction protein family. Its expression in normal tissues is restricted to surface mucinous epithelial cells of the gastric mucosa. When carcinogenesis occurs, ectopic activation occurs frequently in primary gastric cancer and its metastases, as well as in pancreatic, esophageal, ovarian, and lung tumors. Antibody drugs against the Claudin 18.2 target can significantly improve the survival rate of patients.

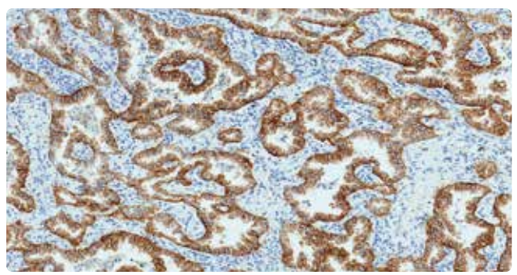


c-MET

IVD

- HIER
- Clone GR524
- Membrane/cytoplasm
- Cat.No. GT2374

c-Met, a protein product encoded by the c-Met proto-oncogene, is a hepatocyte growth factor (HGF) receptor with tyrosine kinase activity. It participates in cell information transmission and the regulation of cytoskeleton rearrangement, and is an important factor for cell proliferation, differentiation and movement. Under physiological conditions, c-Met receptor and HGF transiently combine to exert physiological effects. The simultaneous high expression of HGF and c-Met in tumor tissue forms a positive feedback, leading to unlimited growth and invasive behavior of tumors. Such positive feedback has been confirmed in glioma, osteosarcoma, breast cancer, lung cancer and other malignant tumors. At present, it is believed that c-Met is closely related to the occurrence and metastasis of a variety of tumors.

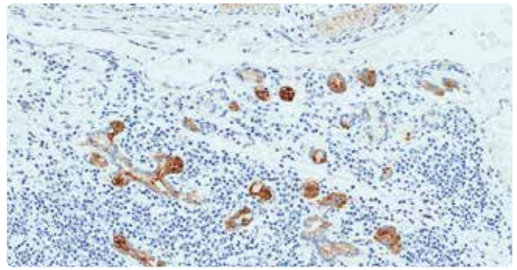


Clusterin

IVD

- HIER
- Clone GR313
- Cytoplasm/secretory type
- Cat.No. GT2548

Clusterin, a secreted heterodimeric glycoprotein, is present in the surface covered epithelial cells of body cavity and most biological fluids, and is involved in cell apoptosis and cell migration. Studies have shown that the expression of Clusterin in a variety of cancers is closely related to the occurrence and progression of tumors. In a variety of malignant tumors such as lung cancer, kidney cancer, breast cancer and so on, the abnormal expression of Clusterin may promote the proliferation and metastasis of tumor cells, and hinder the apoptosis of tumor cells. Therefore, Clusterin can be used as an early detection marker for a variety of malignant tumors and precancerous lesions, and can also be used as a reference index for tumor prognosis evaluation.

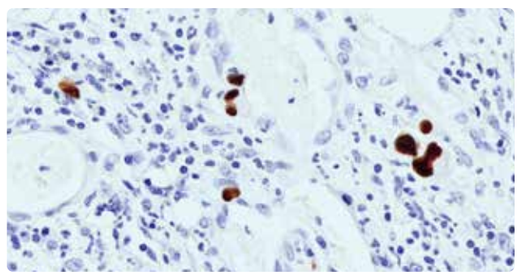


CMV

IVD

- HIER
- Clone DDG9+CCH2
- Cytoplasm/nucleus
- Cat.No. GT2125

Cytomegalovirus (CMV) is an opportunistic pathogen that infects the lungs, kidneys, intestines, and other organs. Individuals are susceptible to infection when their immune system is immature or in a state of immunosuppression. Cytomegalovirus (CMV) produces viral proteins, named early and late proteins, during the process of replication in infected cells. Early proteins are expressed in the nucleus of infected cells from 3 to 24 hours after infection. This antibody detects both early and late CMV proteins. There was no cross reaction with adenovirus, herpes simplex virus and varicella-zoster virus.

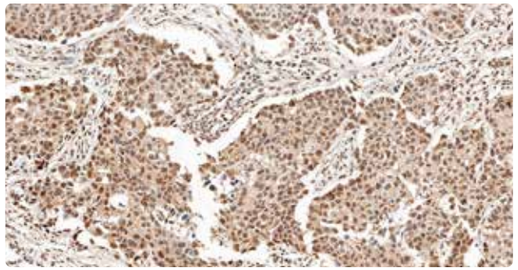


c-MYb

IVD

- HIER
- Clone poly
- Cytoplasm/nucleus
- Cat.No. GT2480

c-Myb is a very important transcription factor, which plays an important role in cell proliferation, differentiation and apoptosis. c-Myb is related to the occurrence and development of a variety of tumors, such as breast cancer, colorectal cancer and other tumors. It is considered to be a potential target for tumor treatment.

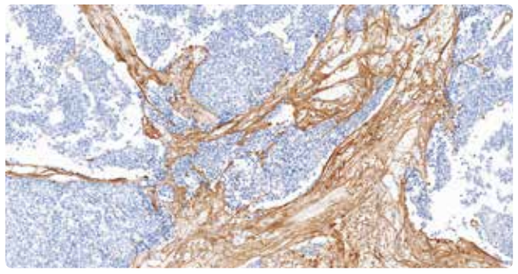


Collagen Type I

IVD

- HIER
- Clone EP236
- Cytoplasm
- Cat.No. GT2401

Collagen Type I (collagen type I) is the most abundant extracellular matrix protein in the human body and is mainly synthesized by fibroblasts, osteoblasts and chondroblasts. It is present in skin, bone, tendon and other connective tissues.

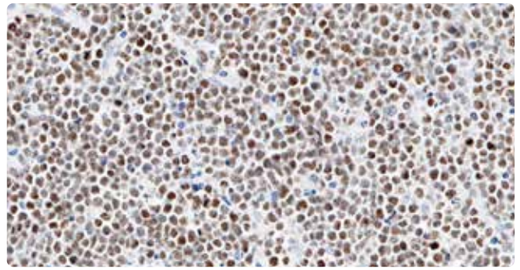


c-MYC

IVD

- HIER
- Clone EP121
- Nucleus
- Cat.No. GT2206

c-MYC gene is a proto-oncogene, which is expressed in a variety of cell types. Cells with active proliferation and various c-Myc gene mutations tend to have increased expression. The abnormal c-Myc gene has a variety of expression forms, including mutation, insertion, activation, translocation and amplification. Its expression products are located in the nucleus and closely related to the cell cycle. c-Myc gene translocation is a characteristic but not specific feature of Burkitt's lymphoma. It also occurs in DLBCL and DLBCL/BL. The histochemical expression of c-Myc indicates the high expression of c-Myc protein, which is not equivalent to c-myc gene translocation. FISH should be performed to confirm the diagnosis.

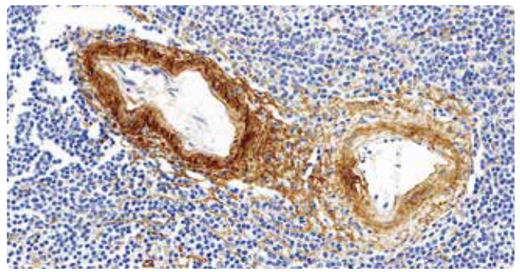


Collagen Type IV

IVD

- HIER
- Clone GR102
- Basement membrane
- Cat.No. GT2327

Collagen Type IV (type IV collagen) is the main component that makes up the basement membrane. This antibody is of great significance in the diagnosis of the loss of basement membrane components caused by tumor invasion, and can be used to distinguish minimally invasive carcinoma from carcinoma in situ.

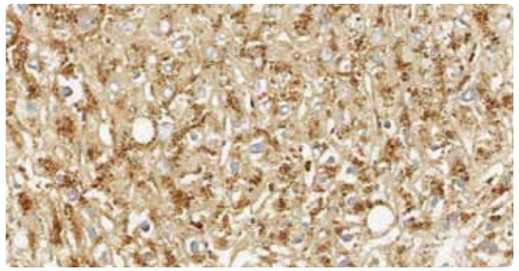


Connexin 43

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2402

Connexin 43 (Cx43) is a channel protein that is responsible for the exchange of materials and information between cells. Its normal expression is crucial for cell proliferation, differentiation, apoptosis and the growth and development of the body. Recent studies have shown that the abnormal expression (reduction or deletion) of Cx43 is closely related to the occurrence, development and metastasis of various tumors. For example, the down-regulation of Cx43 expression plays an important role in the occurrence and development of gastric adenocarcinoma; Combined with CD147, it can be used to predict the invasion and metastasis of primary hepatocellular carcinoma, which has important significance in guiding clinical treatment and judging prognosis.

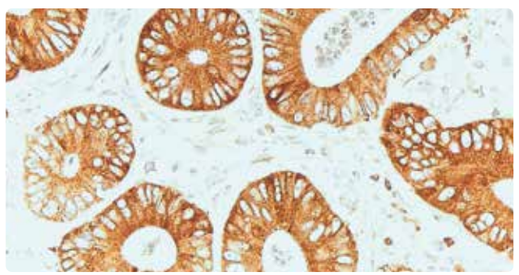


COX-2

IVD

- HIER
- Clone SP21
- Cytoplasm
- Cat.No. GT2113

COX-2 (epoxide hydrolase) is a membrane-bound protease involved in the conversion of arachidonic acid to prostaglandins. It has two isoform forms, COX-1 and COX-2. "In many tissues, COX-1 is frequently expressed and COX-2 is low or absent." Studies have shown that COX-2 is expressed in rectal cancer, lung cancer, esophageal cancer, prostate cancer, breast cancer and ovarian cancer to varying degrees, and is related to tumorigenesis.

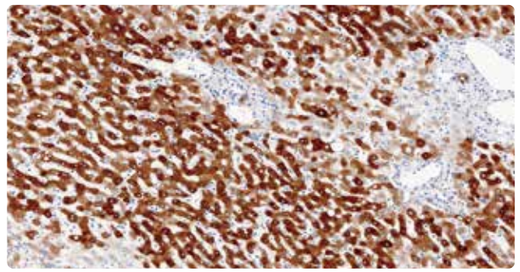


CRP

IVD

- HIER
- Clone GR020
- Cytoplasm
- Cat.No. GT2568

C-reactive protein (CRP) is an acute phase reaction protein synthesized by the liver to protect the body when the body is infected or damaged. It can activate complement and regulate phagocytosis, and remove pathogenic microorganisms invading the body and damaged, necrotic and apoptotic tissue cells. intrahepatic cholangiocarcinoma (ICC) can be divided into two subtypes: bile duct type and bile duct type. The tumor cells of bile duct type ICC are rich in mucin, rich in cell matrix, and positive for S100P and TFF1, while the tumor cells of bile duct type ICC are not mucin. CD56, N-cadherin and CRP were positive in most cases. Therefore, CRP can be used for the classification of intrahepatic cholangiocarcinoma.

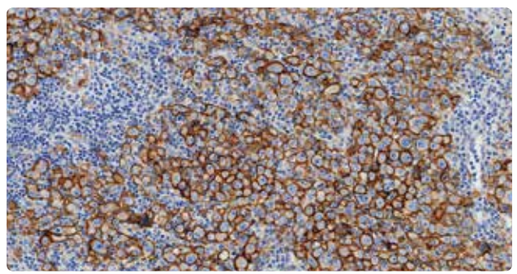


CSPG4

IVD

- HIER
- Clone GR529
- Membrane/cytoplasm
- Cat.No. GT2497

CSPG4 (chondroitin sulfate proteoglycan 4), also known as NG2 (neuronal glial cell antigen 2), is a type I transmembrane protein that affects cell proliferation and migration and stimulates endothelial cell motility during microvascular morphogenesis. Its abnormal expression on cancer cells and angiogenesis systems has been implicated in the aggressive disease progression of a variety of malignant tumors, including glioblastoma multiforme (GBM) and melanoma. It has been shown that CSPG4 is highly expressed on tumor cells and angiogenic vessels in 50% of GBM patients and is associated with significantly shortened survival. In addition, CSPG4 plays a role in melanoma cell spreading and is one of the markers of melanoma.

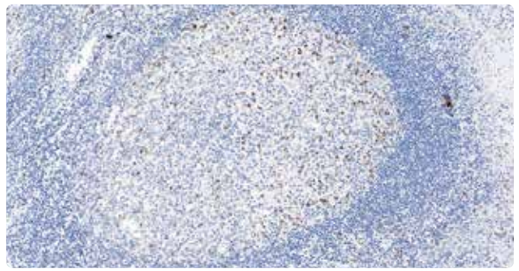


CTLA4

IVD

- HIER
- Clone GR520
- Membrane/cytoplasm
- Cat.No. GT2573

cytotoxic T lymphocyte-associated antigen-4 (CTLA-4), also known as CD152, is a leukocyte differentiation antigen. It is a transmembrane receptor on T cells and shares B7 molecule ligand with CD28. CTLA-4 binds to B7 molecule and induces T cell anreactivity, which is involved in the negative regulation of immune response. Therefore, CTLA-4 plays a role in down-regulating the immune response in the immune checkpoint, which is the target of immunotherapy.

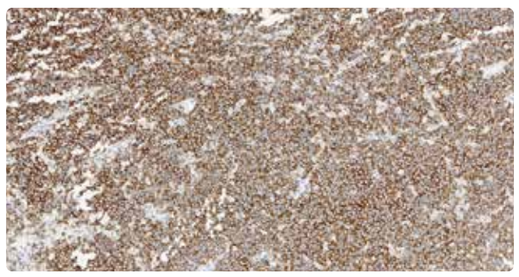


CXCR5

IVD

- HIER
- Clone EPR23463
- Membrane/cytoplasm
- Cat.No. GT2588

CXCR5 (C-X-C chemokine receptor type 5, CXCR5), also known as CD185 (differentiation cluster 185) or Burkitt lymphoma receptor 1 (BLR1), is a G-protein-coupled receptor, It belongs to the CXC chemokine receptor family, and its ligand is the chemokine CXCL13 (also known as BLC). CXCR5 itself is prominently expressed on B cells and T follicular helper cells. In tumor, autoimmune and chronic inflammation, CXCR5 signals mainly through the CXCL13-CXCR5 axis, which can regulate tumor cell invasion, growth and migration.

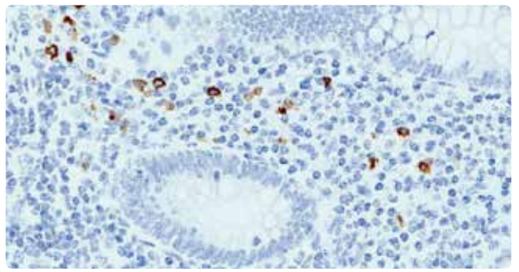


CXCL-13

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2242

The chemokine CXC ligand 13 (CXCL13), also known as B lymphocyte chemokine (BLC) or BCA-1, is required for the homing of B cells to lymphoid tissues and embryonic development of most lymph nodes and is involved in the regulation of autoimmunity and inflammation. CXCL13 can induce epithelial-mesenchymal transition in cells and participate in the growth, invasion and migration of tumor cells. Cxcl13 is a potential prognostic marker for kidney cancer, ovarian cancer, endometrial cancer, colorectal cancer and other cancers. CXCL-13 is highly expressed in angioimmunoblastic T-cell lymphoma (AITL), and its expression rate is low in peripheral T-cell lymphoma, which can be used for the differential diagnosis of AITL and peripheral T-cell lymphoma.

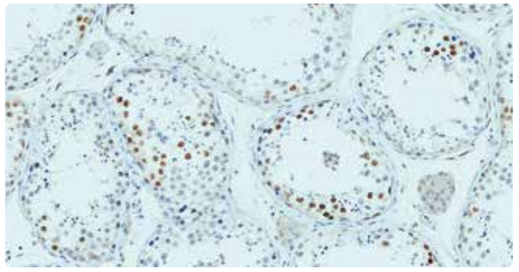


Cyclin B3

IVD

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2570

Cyclin B3, also known as CCNB3, is a positive regulator of cyclin-dependent kinases (CDKs), which plays an important role in the cell cycle and is specifically expressed in the testis. In addition, Cyclin B3 is a marker of BCOR-CCNB3 gene rearrangement sarcoma (a highly malignant, undifferentiated small round cell sarcoma that occurs in the bone tissue of male adolescents and genetically displays BCOR-CCNB3 gene fusion) with high sensitivity and specificity, which can be used for the initial screening of BCOR-CCNB3 sarcoma. It can be used for the differential diagnosis of undifferentiated small round cell sarcoma.

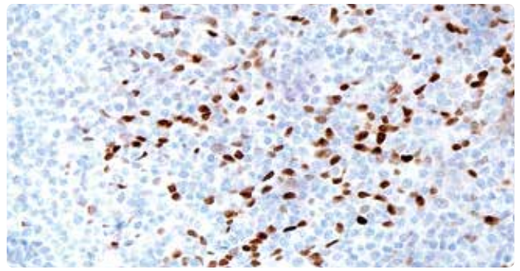


Cyclin D1

IVD

- HIER
- Clone GR010
- Nucleus
- Cat.No. GT2058

Cyclin D1, also known as bc1-1 or PRD-1, is a nuclear protein with a molecular weight of 36kDa. It belongs to the family of cell cycle regulatory proteins and is an important regulator of G1 phase into S phase in the cell cycle. This antibody is commonly used to distinguish mantle cell lymphoma from other types of B-cell lymphoma, and can also be used in cell cycle studies.

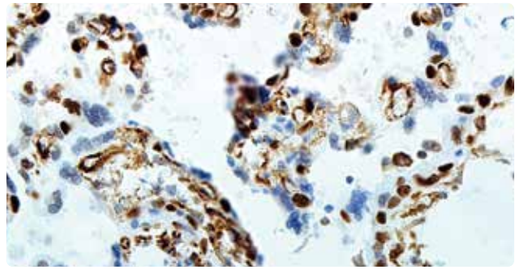


Cyclin E

IVD

- HIER
- Clone ZM121
- Nucleus
- Cat.No. GT2231

Cyclin E is a regulator of cyclin-dependent kinases that regulate the mitotic process of cells from G1 to S phase and is expressed in the column of villous trophoblast cells. Cyclin E gene is amplified or overexpressed in most cancers, including breast cancer, cervical cancer, endometrial cancer, ovarian cancer, gastrointestinal cancer, etc.

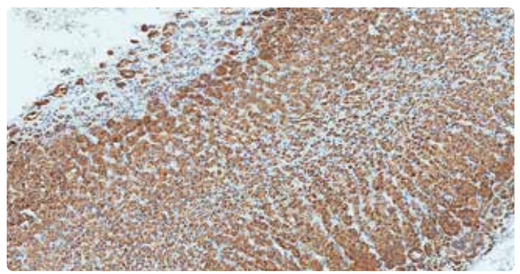


CYP11B1

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2583

CYP11B1 is a cytochrome P450 monooxygenase involved in the biosynthesis of adrenocortical hormone, which can regulate the metabolism of 11-deoxycorticosterone to corticosterone and 11-dehydrocortisol to cortisol. CYP11B1 is normally expressed in the zona glomerulosum of the adrenal cortex and localized to the inner mitochondrial membrane. Mutations in the CYP11B1 gene, which encodes this protein, cause 11β-hydroxylase deficiency, an autosomal recessive congenital adrenal hyperplasia. In addition, downregulation of CYP11B1 gene expression may be involved in the formation of aldosterone-producing adenomas.

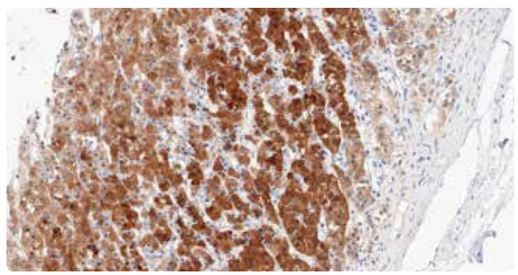


CYP11B2

IVD

- HIER
- Clone EPR10494
- Cytoplasm
- Cat.No. GT2569

CYP11B2, also known as aldosterone synthase, is a cytochrome P450 monooxygenase that catalyzes the biosynthesis of the adrenal cortical hormone aldosterone and is localized in the inner mitochondrial membrane. In the adrenal gland, CYP11B2 is mainly expressed in the zona glomerulopathy, and its IHC detection is helpful for the auxiliary diagnosis of adrenal cortical lesions. In addition, CYP11B2 is also present in some human cardiomyocytes, vascular endothelial cells, interstitial cells and smooth muscle cells, which plays a regulatory role in the development of cardiomyopathy, hypertension and atherosclerosis.

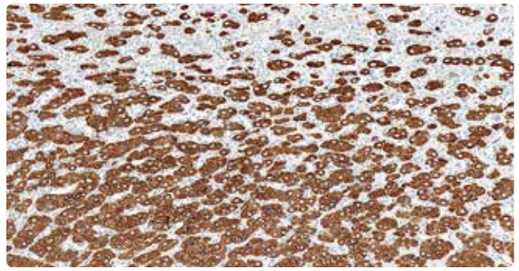


CYP17A1

IVD

- HIER
- Clone GM315
- Cytoplasm
- Cat.No. GT2578

CYP17A1 is a cytochrome P450 monooxygenase with 17α-hydroxylase activity and lyase activity, and plays an important role in the synthesis of glucocorticoids and sex hormones. CYP17A1 is mainly expressed in steroidogenic tissues such as adrenal gland and gonad. Mutations of CYP17A1 gene are associated with isolated steroid 17α-hydroxylase deficiency, 17α-hydroxylase /17, 20-lyase deficiency, pseudohermaphroditism and adrenal hyperplasia. In addition, CYP17A1 is also closely related to the occurrence and development of some sex-related malignant tumors. Studies have shown that the abnormal expression of CYP17A1 may be a high risk factor for the development of prostate cancer. CYP17A1 inhibitors such as abiraterone can be used for the targeted therapy of prostate cancer

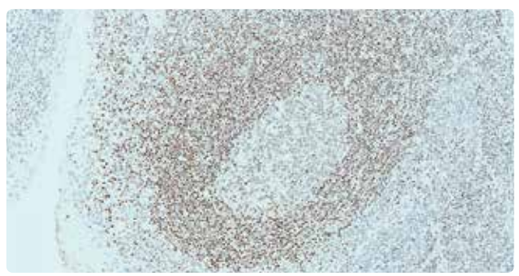


DAXX

IVD

- HIER
- Clone GR510
- Membrane/cytoplasm/nucleus
- Cat.No. GT2527

death domain associated protein (DAXX) is a highly conserved nuclear protein that shutdles between the nucleus, cytoplasm and cell membrane. It interacts with a variety of proteins, Such as apoptosis antigen fas, centromeric protein c, and transcription factor polycythemia virus e26 oncogene homolog 1. DAXX is widely present in human normal tissues and a variety of tumor cells, and is closely related to ovarian cancer, non-small cell lung cancer, pancreatic neuroendocrine tumors and brain glioma. For example, DAXX can promote the proliferation and invasion of ovarian cancer, and the high expression of DAXX indicates a poor prognosis of patients with non-small cell lung cancer.

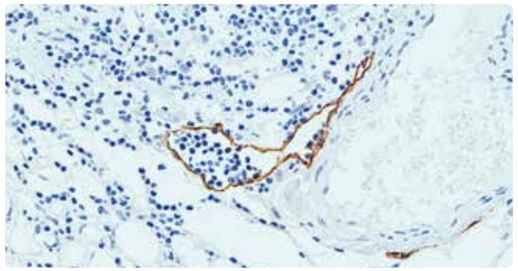


D2-40

IVD

- HIER
- Clone D2-40
- Membrane/cytoplasm
- Cat.No. GM3619

Podoplanin, also known as D2-40 or M2A, is a type Ⅰ transmembrane mucin. Podoplanin can be expressed on the surface of lymphatic endothelial cells and mesothelial cells, and also on primordial germ cells. In gynecological pathology, D2-40 is mainly used for two purposes: first, it is used to identify whether the fissured around the tumor focus is lymphatic vessels, so as to determine whether there is intravascular cancer embolus; The second is that D2-40 is specifically expressed in dysgerminoma of primordial germ cell tumors, so it can be used as one of a group of differential diagnostic markers.

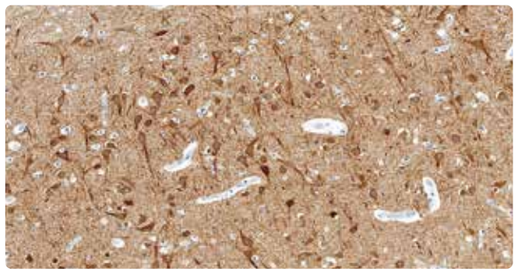


DCLK1

IVD

- HIER
- Clone GR519
- Membrane/cytoplasm
- Cat.No. GT2565

Doublecortin like kinase 1 (DCLK1), also known as DCAMKL1, plays an important role in the formation and development of malignant tumors by regulating microtubule polymerization and promoting neuronal migration. DCLK1 is highly expressed in a variety of tumor cells, including gastric cancer, colorectal cancer, pancreatic ductal adenocarcinoma (PDAC) and so on. DCLK1 is also a marker of intestinal cancer stem cells, which has become a potential drug target for cancer treatment. In addition, DCLK1 can also be used as a TNBC subsubtype together with AR, CD8 and FOXC1 in triple-negative breast cancer.

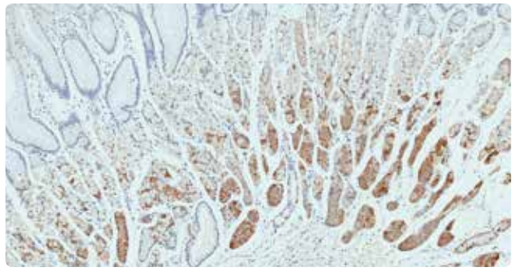


DDIT3

IVD

- HIER
- Clone 9C8
- Nucleus
- Cat.No. GT2551

DDIT3, also known as GADD153 or CHOP, is localized in the nucleus and ubiquitously expressed in the organism. It is upregulated in response to DNA damage and induces cell cycle arrest and apoptosis in response to endoplasmic reticulum stress. Studies have shown that myxoid liposarcoma often has FUS-DDIT3 gene fusion. DDIT3 protein expression can be used to distinguish advanced myxoid liposarcoma from other round cell sarcomas. DDIT3 is also expressed in some cases of dedifferentiated liposarcoma (15%) and solitary fibrous tumor (25%). Ddit3 can be used in combination with the clinicopathological features and other immunohistochemical markers or molecular detection to help distinguish advanced myxoid liposarcoma from other round cell sarcomas. DDIT3 can also be used in the differential diagnosis of follicular thyroid carcinoma and follicular thyroid adenoma.

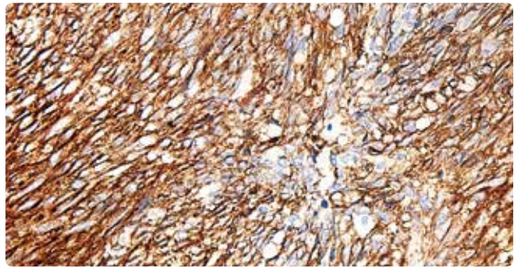


DOG1

IVD

- HIER
- Clone SP31
- Cytoplasm/nucleus
- Cat.No. GT2054

DOG-1 (Discovered on GIST-1) is a cell membrane surface protein that is specifically expressed in gastrointestinal stromal tumors. The function of DOG-1 is not well understood, but it is selectively expressed in gastrointestinal stromal tumors. DOG1 is expressed in approximately 87% of gists. Occasionally, DOG1 is expressed in synovial sarcoma, leiomyosarcoma, etc. They are complementary to CD117 in the diagnosis of gastrointestinal stromal tumors.

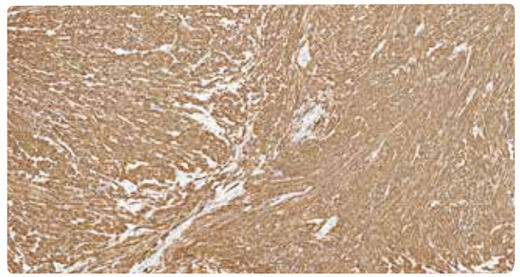


Desmin

IVD

- HIER
- Clone GTM2
- Cytoplasm
- Cat.No. GT2252

Desmin (desmin) is an intermediate filament protein with a molecular weight of 53kDa. Desmin is widely distributed in skeletal muscle, cardiac muscle, smooth muscle, myoepithelial cells and their derived tumors. The antibody is mainly used to label smooth muscle and rhabdomyoblastic tumors.

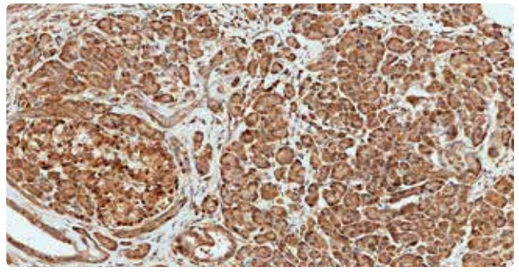


DPC4

IVD

- HIER
- Clone B-8
- Cytoplasm/nucleus
- Cat.No. GT2080

DPC4 gene, also known as SMAD4 gene, is a tumor suppressor gene originally identified from pancreatic cancer. It is located on chromosome 18q21.1 and involved in the regulation of TGF-β signaling pathway. It has been found that nearly 50% of pancreatic ductal adenocarcinomas have mutation or deletion of DPC4 gene, and the loss of DPC4 expression often occurs in the late stage of tumor progression. In addition, DPC4 mutation or deletion can also occur in a variety of tumors, such as acute myeloid leukemia, ovarian cancer, colon cancer and breast cancer.

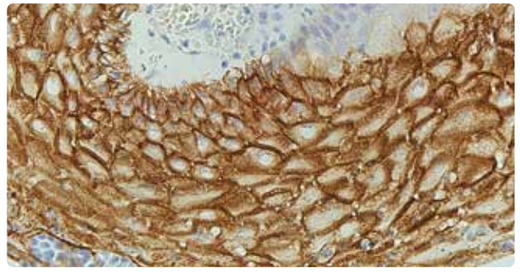


DSG3

IVD

- HIER
- Clone 5G11
- Membrane
- Cat.No. GT2256

DSG3 (desmoglein 3) is one of the four members of the desmosomal protein family. It is a calcium-bound membrane glycoprotein that participates in the formation of desmosomal junctions between cells and plays a role by connecting with desmoplectin and intermediate filament fibers. Desmosome is a cell junction structure between cells of epithelium, myocardium and other tissues. In human keratinocytes, DSG3 proteins form a raft-like junction structure, and disruption of this structure can affect the formation of desmosome junctions. Pemphigus vulgaris (Pemphigus vulgaris) is a fatal skin disease caused by the attack of DSG3 by autoantibodies. In addition, DSG3 was overexpressed in lung squamous cell carcinoma, while its expression was very limited in adenocarcinoma and other non-neoplastic lung tissues. The sensitivity and specificity of DSG3 detected by immunohistochemistry in the diagnosis of lung squamous cell carcinoma were 98% and 99%, respectively. Dsg3 and p40 had similar clinical significance. Therefore, DSG3 is a useful auxiliary marker to distinguish squamous cell carcinoma from other types of lung cancer.

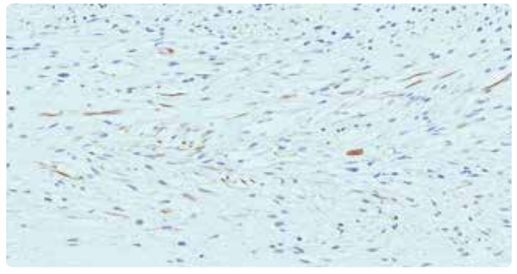


DUX4

IVD

- HIER
- Clone P4H2
- Nucleus
- Cat.No. GT2596

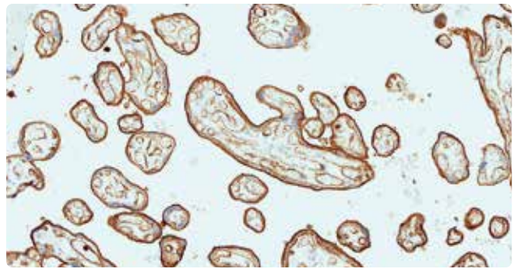
DUX4 gene is located in the D4Z4 duplication region of the proximal telomeric region of the long arm of chromosome 4. DUX4 protein is a double homeobox transcription factor. The N terminus contains two homeodomain 1 and homeodomain 2 that recognize DNA. DUX4 has regulatory functions in genes involved in embryonic development, cell signaling pathways, lipid metabolism, cell-mediated immune response and cardiovascular system development. CIC-DUX4 fusion positive small round cell tumor, characterized by t(4; 19) (q35; q13) or t(10; 19) (q26; q13) translocation, which is a small round cell tumor morphologically similar to Ewing's sarcoma, but lacks the characteristic gene fusion of Ewing's sarcoma, and has a poor clinical prognosis. DUX4 can be used for the diagnosis of CIC-DUX4 fusion positive small round cell tumors. It should be noted that DUX4 shows a nuclear expression pattern in CIC-DUX4 fusion positive small round cell tumors, but cytoplasmic staining may occur in other normal tissues and tumor tissues.



Dysferlin

- HIER
- Clone GR522
- Membrane/cytoplasm
- Cat.No. GT2581

Dysferlin protein belongs to the Ferlin protein family and is a transmembrane protein involved in muscle cell membrane fusion and wound repair. Dysferlin protein is highly expressed in skeletal muscle and myocardium, and the expression level in skeletal muscle is higher than that in myocardium. Dysferlin protein is also expressed in monocytes and vascular endothelium. Dysferlin deficiency in muscle fibers caused by mutations in the Dysferlin gene leads to hereditary myopathies characterized by progressive muscle atrophy. Clinically, dysferlin deficiency is characterized by limb-girdle muscular dystrophy type 2B, Miyoshi type, and anterior tibial myopathy.

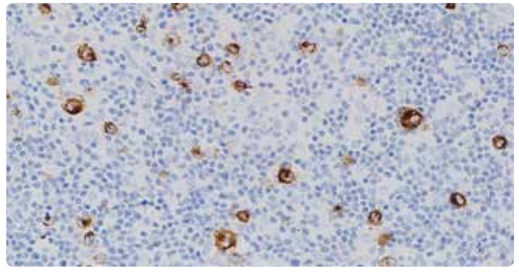


EBV

IVD

- HIER
- Clone CS.1-4
- Membrane/cytoplasm
- Cat.No. GM0897

Epstein-Barr virus (EBV) is a human herpes virus that is associated with many tumors. Such as nasopharyngeal carcinoma, infectious mononucleosis, gastric cancer, Bukitt lymphoma, Hodgkin lymphoma, angioimmunoblastic T-cell lymphoma, lymphomatoid granulomatosis, nasal T/NK lymphoma, post-transplant lymphoproliferative disorder and smooth muscle tumor, AIDS-related lymphoma, congenital immunodeficiency associated lymphoma and so on. EBER in situ hybridization is the most sensitive method to detect EBV infection in paraffin sections. However, in classical lymphoma and lymphomatoid granulomatosis, the protein content of LMP-1 is high, and EBV infection can still be detected by immunohistochemistry.

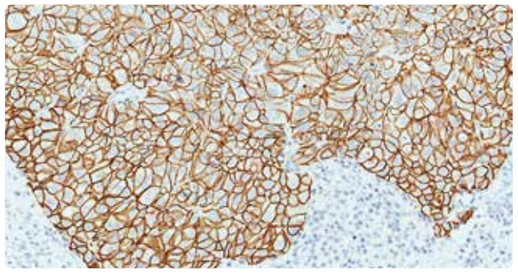


E-Cadherin

IVD

- HIER/LIER
- Clone GR111/GM108
- Membrane
- Cat.No. GT2107/GT2348

E-cadherin, a transmembrane glycoprotein, belongs to a family of calcium-dependent adhesion molecules in epithelial cells. It plays an important role in the growth and development of tissues. The decrease/loss of E-cadherin function can lead to the destruction of cell junctions, which is related to the invasion and metastasis of tumor cells. Its expression is inversely proportional to the degree of tumor differentiation. Loss of expression is associated with the progression of many cancers, including breast cancer, bladder cancer, and head and neck squamous cell carcinoma, and is also associated with high grade hepatocellular carcinoma. "Although this antibody is not expressed in epithelioid sarcomas, its expression in sarcomas may be associated with epithelioid differentiation." It was used to distinguish non-neoplastic mesothelial cells from cancer cells in the exudate (ovarian tumor cells highly express E-cadherin in the exudate); And in distinguishing mesothelioma from other tumors that lack cell adhesion (e.g., lobular breast cancer and gastric cancer, which have a high frequency of mutations). Are of some value; It has also been reported that it can be used in the differentiation of lobular and ductal breast cancer (the latter is often positive, the former is often negative).

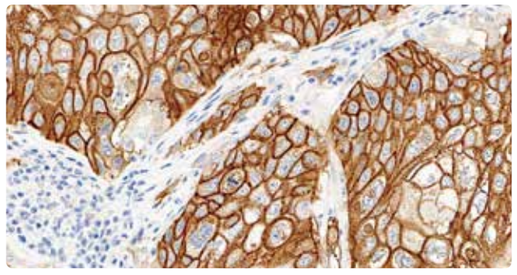


EGFR

IVD

- HIER
- Clone EP22
- Membrane/cytoplasm
- Cat.No. GT2093

EGFR is a 170kDa membrane protein consisting of an extracellular domain that binds epidermal growth factor, a short transmembrane domain, and an intracellular domain with tyrosine kinase activity. EGFR is expressed in a variety of normal tissues, especially in the basal layer of stratified epithelium and squamous epithelium. It is overexpressed in many tumors, such as breast cancer, bladder cancer, pancreatic cancer, gastric cancer and thyroid cancer, and its positive expression indicates poor prognosis.

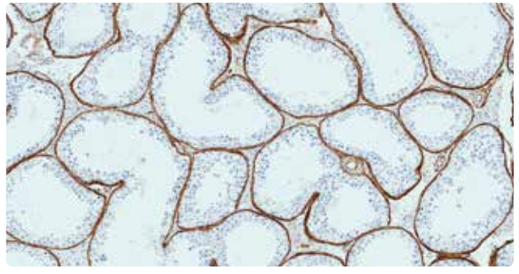


Elastin

IVD

- HIER
- Clone GR113
- Membrane
- Cat.No. GT2390

Elastin is a major component of elastic fibers that provide elasticity to loose connective tissue and collagen fibers. It is also the main structural protein of the extracellular matrix of arteries and plays a regulatory role in arterial development by controlling the proliferation of smooth muscle and stabilizing arterial structure. Elastin is significantly expressed in the testis, lung, connective tissue and other tissues. Elastin deficiency may lead to supravalvular aortic stenosis and Williams-Beuren syndrome. Abnormal expression of Elastin may be associated with the development of hepatocellular carcinoma, colorectal cancer, breast cancer and other cancers.

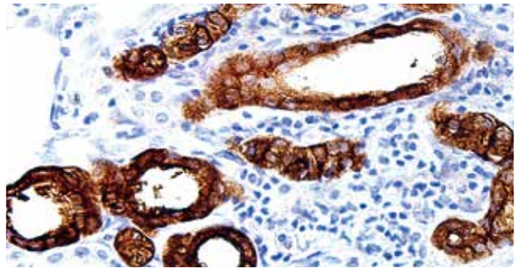


EMA

IVD

- HIER
- Clone E29
- Membrane/cytoplasm
- Cat.No. GM0613

Epithelial Membrane Antigen (EMA) is a transmembrane glycoprotein that is widely distributed in various epithelial cells and tumors from which they are derived. Ema can be used to label most normal epithelial and epithelial tumors. It is often cytoplasmic in mesothelioma. Plasma cells, a variety of peripheral blood B cells activated by T cells and some mesenchyme (notochordal and perineural fibroblasts) were also positive. T cell-rich B cell lymphoma, diffuse large B cell lymphoma and its variants, 95% large cell anaplastic, monocytoid B cell lymphoma and 18% T cell lymphoma were positive. It was also expressed in some myeloma, 60% of nodular lymphocytes in Hodgkin's lymphoma, synovial sarcoma, epithelioid sarcoma and other tumors. EMA is often used to distinguish mesothelial reaction from mesothelioma (the membrane staining in mesothelioma is more intense). Differentiation between mesothelioma and adenocarcinoma (cell membrane staining in the former); Differentiation of basal cell, squamous cell and basal cell carcinoma; Alk-positive large cell anaplastic lymphoma in lymph nodes is differentiated from other lymphoma types.

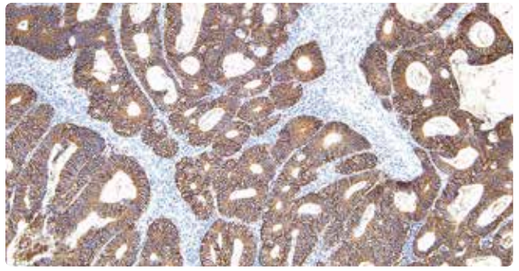


Ep-CAM

IVD

- HIER
- Clone Ber-EP4
- Membrane/cytoplasm
- Cat.No. GM0804

Ep-CAM (Epithelial cell-cell adhesion molecule) is a kind of cell surface glycoprotein. It is expressed in most normal and neoplastic epithelial cells, but not in squamous epithelium and liver cells. It is expressed in most adenocarcinomas and neuroendocrine tumors. Germline mutation of Ep-CAM, which is close to the upstream of MSH2, leads to its exon loss and activation of MSH2 gene, resulting in the lack of MSH2 expression. Ep-CAM accounts for 1-3% of hereditary nonpolyposis colorectal cancer patients. It can be used as a marker for the diagnosis of epithelial tumors. It is mainly used for the diagnosis of adenocarcinoma and the differential diagnosis of adenocarcinoma and mesothelioma.

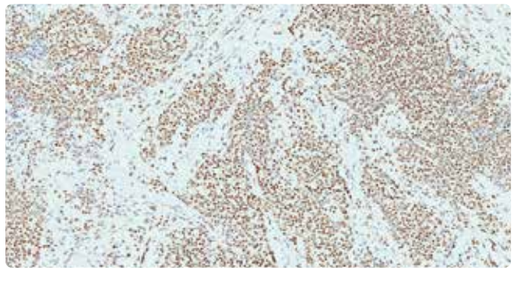


EPM2AIP1

IVD

- HIER
- Clone GM012
- Nucleus
- Cat.No. GT2545

EPM2AIP1 (EPM2A interacting protein 1), the first putative laforin binding partner but whose function remains unclear, may play a key role in the underlying pathogenesis of progressive myoclonic epilepsy type 2 (EPM2). EPM2AIP1 and MLH1 genes share a common promoter, and methylation of this promoter has been shown to affect both genes, so EPM2AIP1 immunohistochemistry can be used as an alternative test for MLH1 promoter methylation in cancers such as endometrial cancer.

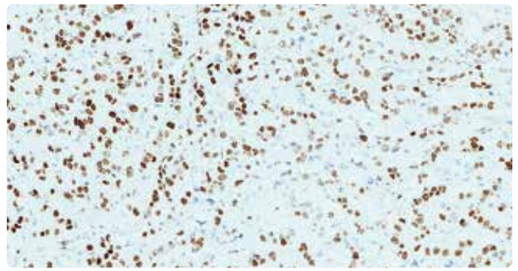


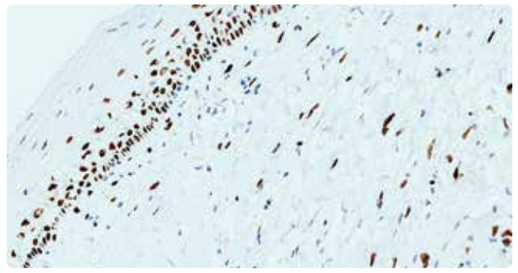
ER

IVD

- HIER
- Clone SP1
- Nucleus
- Cat.No. GT2056

Estrogen Receptor (ER) antibody recognizes the human estrogen receptor alpha subtype and is expressed in the endometrium, smooth muscle cells, normal breast epithelium and breast cancer. It is an important indicator of breast cancer prognosis and endocrine therapy. About 50-60% of breast cancer patients express estrogen receptor.



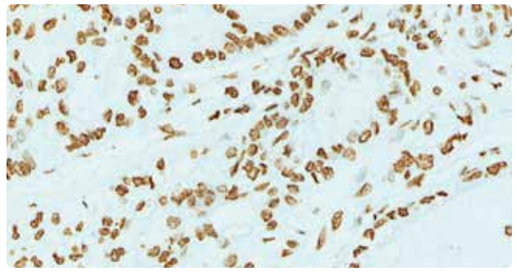


ERCC1

IVD

- HIER
- Clone SP68
- Nucleus
- Cat.No. GT2155

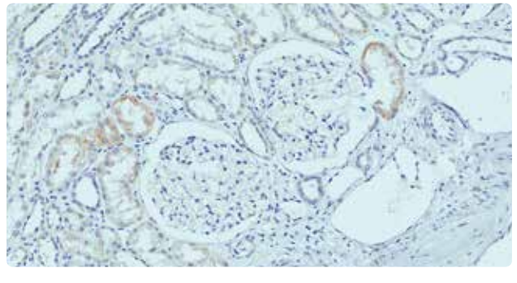
ERCC1 is a highly conserved excision ribozyme in the nucleotide excision repair pathway and is essential for efficient repair of alkylating agent-induced DNA complexes. Current studies have shown that patients with negative ERCC1 expression may benefit from adjuvant chemotherapy with cisplatin. The positive expression of ERCC1 protein may indicate the presence of resistance to this platinum drug, and the expression of ERCC1 protein may be one of the indicators of whether to use cisplatin adjuvant chemotherapy.



EXT1

- HIER
- Clone poly
- Membrane/cytoplasm
- Cat.No. GT2585

exostosin 1 (EXT1) is a type II transmembrane glycosyltransferase, which acts as a co-polymerase with exostosin 2 (EXT2) in a heterodimeric form during the elongation of heparan sulfate chain. EXT1/2 is ubiquitously expressed in mammalian tissues, and its physiological function may be related to the maintenance of glomerular podocyte and basement membrane structure. Mutations in the gene encoding EXT1 protein cause type I multiple exophysiomas. In recent years, studies have shown that EXT1/EXT2 may be specific biomarkers of autoimmune secondary membranous nephropathy. Immunohistochemical staining showed that EXT1/EXT2 deposits along the glomerular basement membrane in granular form, without significant mesangial and cyst wall staining.

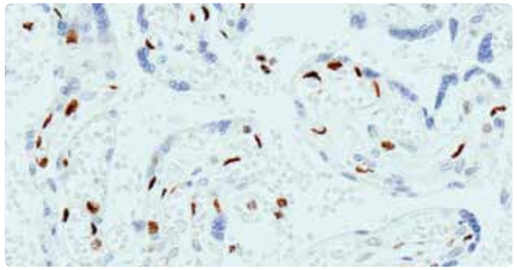


ERG

IVD

- HIER
- Clone EP111
- Nucleus
- Cat.No. GT2199

ERG is a proto-oncogene and a member of the ETS family of transcription factors located at 21q22. Genes in the ETS family regulate embryonic development, cell proliferation, differentiation, angiogenesis, inflammation, and apoptosis. ERG is expressed in vascular and lymphatic endothelial cells as well as bone marrow stem cells. ERG was expressed in all benign and malignant vascular tumors, and it was more positive than CD34 (often stained for many stromal cells) and CD31 (often stained for histiocytes and plasma cells). TMPRSS2-ERG gene fusion is found in prostate cancer (40-50%, the only cancer type that expresses ERG). ERG is also positive in meningiomas, epithelioid sarcomas, malignant rhabdoid tumors, acute myeloid leukemia, and extramedullary myelosarcomas. ERG gene rearrangement has been observed in Ewing's sarcoma.

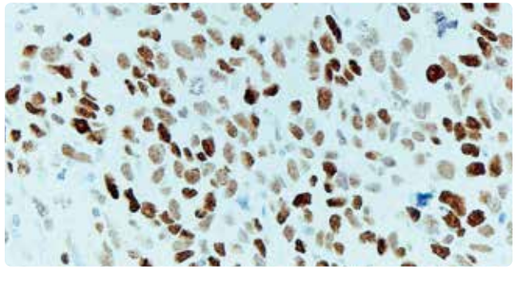


EZH2

IVD

- HIER
- Clone SP129
- Nucleus
- Cat.No. GT2285

Enhancer of Zeste Homolog2 (EZH2) gene is involved in a variety of biological processes and is related to the regulation of cell growth. EZH2 expression is found in a variety of malignant tumors except melanoma, including prostate cancer, breast cancer, uterine cancer, gastric cancer, non-small cell lung cancer and renal cell cancer. EZH2 is usually expressed in the center of the lymph node follicles, but not in T cells, plasma cells, or NK/T cells in the mantle area, interfollicular and follicular areas. However, EZH2 expression is observed in most B-cell and T-cell lymphomas.



Factor VIII-R

IVD

- HIER
- Clone ZM64
- Cytoplasm
- Cat.No. GM0616

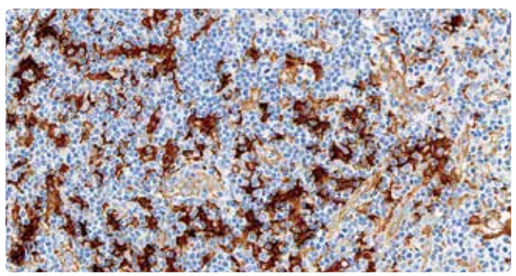
Factor VIII is a plasma glycoprotein synthesized by endothelial cells or megakaryocytes in the presence of Werbel-Palade bodies. It is mainly distributed in vascular endothelial cells, megakaryocytes, platelets and mast cells. It is also expressed in 50% of benign vascular tumors and very few malignant vascular tumors. This antibody is often used in the differential diagnosis of benign hemangioma and hemangioendothelioma.

Fascin

IVD

- HIER
- Clone 55K-2
- Cytoplasm
- Cat.No. GM3567

Fascin is a 55-kda protein encoded by the human homologous sn gene and is associated with the formation of microfilaments in mitosis. In normal tissues, fascin is mainly expressed in various dendritic cells and lymphatic sinus endothelial cells. In addition, Fascin is usually expressed in R-S cells of Hodgkin's lymphoma. This antibody is mainly used in the diagnosis of Hodgkin's lymphoma.

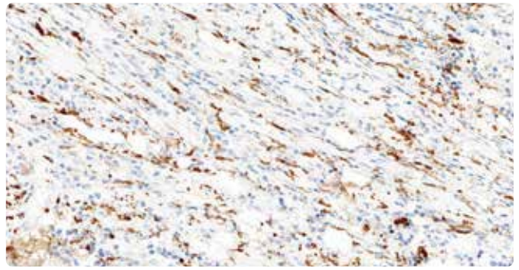


Factor VIII A

IVD

- HIER
- Clone EP3372
- Cytoplasm
- Cat.No. GT2404

Factor XIII A is a beta globulin found in plasma. Megakaryocytes, monocytes/macrophages, dendritic reticular cells in reactive lymph nodes, dermal dendritic cells, fibroblast-like interstitial cells, and Kupffer cells in the liver can be seen in normal tissues. The tumor can be seen in dermal fibroma, atypical xanthomata and malignant fibrous histiocytoma, and some sarcomas, granular cell tumors and neurofibromas can also be positive. The dendritic cells in fibrous histiocytoma can be expressed. It can be used to differentiate benign fibrous histiocytoma (negative) from dermatofibrosarcoma protuberans (positive), and to differentiate neurofibroma (positive) from neuroregenerative melanocytic nevus (negative).

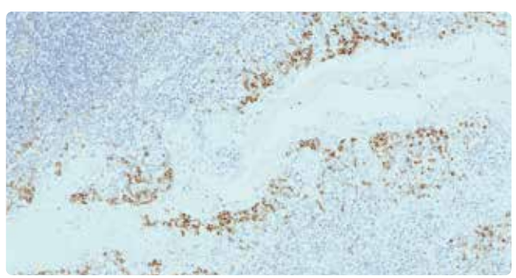


FCRL4

IVD

- HIER
- Clone GR114
- Membrane
- Cat.No. GT2594

Fc receptor-like protein 4 (FCRL4), also known as IRTA1, is a member of the immunoglobulin receptor superfamily, which can inhibit B cell receptor-mediated signaling and proliferation, and plays an important role in B cell activation and differentiation. FCRL4 is expressed on memory B cells and monocyte-like B cells, and is preferentially expressed in memory B cells associated with mucosal tissues. Studies have found that FCRL4 is associated with mucosa-associated lymphoid tissue lymphoma (MALT) and multiple myeloma.

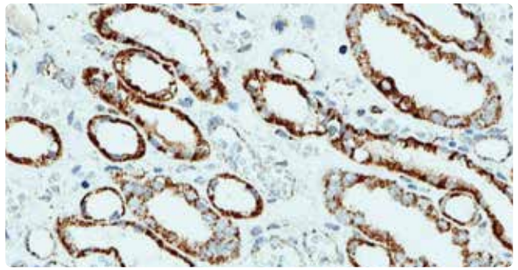


FH

IVD

- HIER
- Clone J-13
- Cytoplasm
- Cat.No. GT2444

FH (fumarate hydratase) is a key enzyme involved in the tricarboxylic acid cycle, which catalyzes the intracellular conversion of fumarate to L-malate. The patient with the hereditary leiomyomatosis and renal cell cancer (HLRCC) syndrome, which is caused by mutations in the gene encoding FH, is also at risk for cutaneous multiple leiomyomas and uterine leiomyomas. Hlrcc-associated renal cell carcinoma usually presents with advanced stage, aggressive behavior, and poor clinical prognosis.

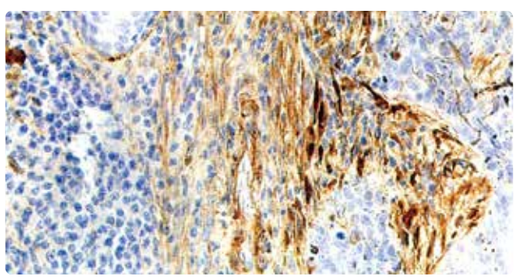


Fibronectin

IVD

- HIER
- Clone 568
- Cytoplasm
- Cat.No. GT2178

Fibronectin/FN is an important component of extracellular matrix, which is involved in cell differentiation, migration and tumor invasion. This antibody is used to assist clinical diagnosis of invasion and prognosis of a variety of malignant epithelial tumors.

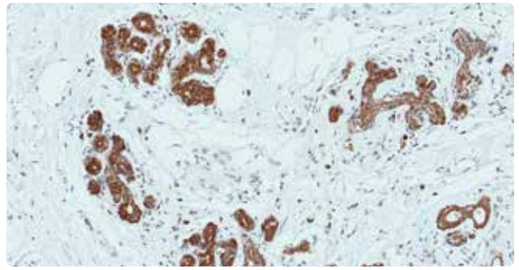


FHIT

IVD

- HIER
- Clone GR523
- Cytoplasm/nucleus
- Cat.No. GT2477

fragile histidine triad (FHIT) is a tumor suppressor gene located at 3p14.2, which is widely present in the human body. Its protein product FHIT is involved in the regulation of signal transduction, cell cycle and apoptosis, and shows varying degrees of loss or decreased expression in many tumor tissues and tumor cell lines, such as breast cancer, lung cancer, and gastric cancer. Therefore, FHIT has clinical significance in the early diagnosis, treatment and prognosis evaluation of tumors.

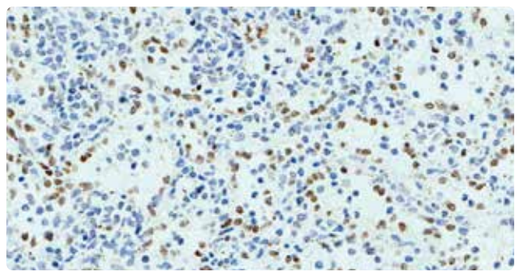


FLI-1

IVD

- HIER
- Clone G146-22
- Nucleus
- Cat.No. GT2081

FLI-1 (Friend leukemia integration-1) is a transcription factor. It is involved in cell proliferation, tumorigenesis and angiogenesis. Application in pathology: 1. The sensitivity and specificity of diagnosis and differential diagnosis of Ewing's sarcoma/primitive neuroectodermal tumor are higher than those of CD99. 2. Differential diagnosis of angiosarcoma from other sarcomas, poorly differentiated carcinoma and malignant melanoma. 3. It can be used as a marker of endothelial cells, and its sensitivity and specificity are better than those of CD31 and CD34.

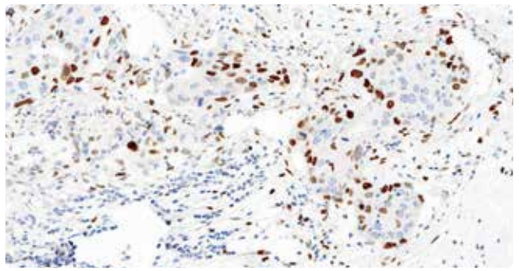


Fos-B

IVD

- HIER
- Clone GR009
- Nucleus
- Cat.No. GT2449

Fos gene family, as proto-oncogenes, widely exists in various organs and tissues of the body. FOSB is a highly sensitive and useful marker for the diagnosis of pseudomyogenous hemangio-endothelioma. The immunodetection of FOSB can be helpful in differentiating PMT from other histologically similar lesions, including epithelioid sarcoma and other vascular tumors.

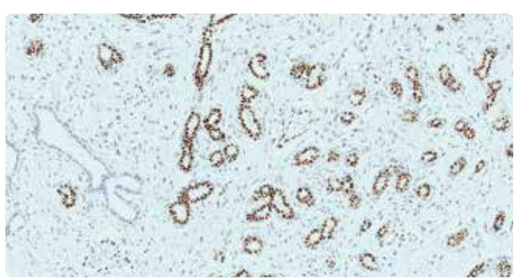


FOXC1

IVD

- HIER
- Clone GR021
- Nucleus
- Cat.No. GT2564

forkhead box protein C1 (FOXC1) is a member of the forkhead box transcription factor superfamily, which plays an important role in cell growth, survival, differentiation and migration. The abnormal expression of FOXC1 contributes to the occurrence of a variety of malignant tumors, such as breast cancer, hepatocellular carcinoma, and gastric cancer. FOXC1 is also associated with tumor metastasis, staging, recurrence, prognosis evaluation and drug resistance. Studies have found that FOXC1 may be related to the chemosensitivity of anthracyclines, and it can be used as a potential biomarker for chemotherapy regimen selection and prognosis prediction of triple negative breast cancer.

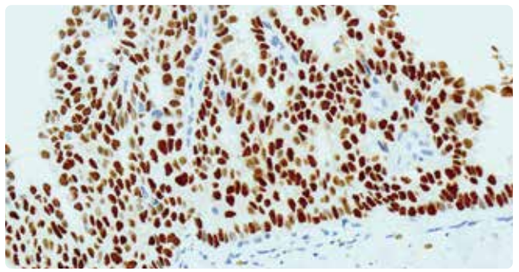


FOXA1

IVD

- HIER
- Clone EP277
- Nucleus
- Cat.No. GT2360

FOX A1, also known as hepatocyte nuclear factor 3α (HNF3α), is a transcription factor. The expression of FOXA1 has been detected in many cancer tissues, such as hormone-dependent cancers such as breast cancer, ovarian cancer, and pancreatic cancer. It has been reported that the expression level of FoxA1 protein is higher in LuminalA-type breast cancer and LuminalB-type breast cancer, while the expression level is low or no expression in triple-negative breast cancer. Therefore, FoxA1 can be used as an auxiliary diagnostic molecule for accurate subtype of breast cancer.

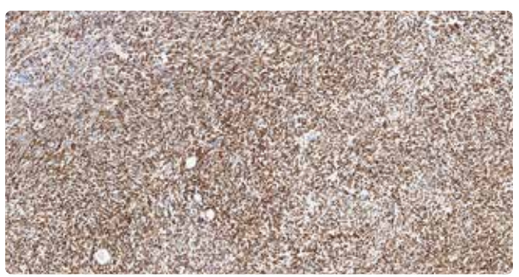


FOXL2

IVD

- HIER
- Clone EPR23523-68
- Nucleus
- Cat.No. GT2535

FOXL2 is a single-exon gene encoding a forkhead transcription factor. The normal expression of FOXL2 gene is an extremely important basic condition for maintaining female sex characteristics, a key factor for ovarian differentiation and maintenance, and can inhibit the somatic testicular genetic program. Foxl2 is mainly expressed in ovarian, parathyroid and sex cord-stromal tumors. The mutation of FOXL2 gene can lead to abnormal female sex characteristics. It is also confirmed to be the pathogenic gene of blepharophimosis-ptosis-epicanthus inversus syndrome (BPES). In addition, mutations in FOXL2 gene are associated with premature ovarian failure (POF) and reproductive system tumors. FOXL2 is usually used in the diagnosis of sex cord stromal tumors together with inhibin, Calretinin, and SF-1.

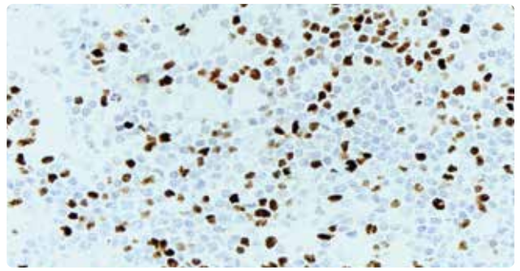


FOXP1

IVD

- HIER
- Clone SP133
- Nucleus
- Cat.No. GT2184

FOXP1 (Forkhead box prote 1) is a member of the FOXP subfamily (FOXP1-4) transcription factors. Studies have shown that FOXP1 is a transcription factor related to normal embryonic development and cardiomyocyte development. FOXP1 is expressed in different stages of B cell differentiation, but not in plasma cells. FOXP1 is a prognostic indicator of diffuse large B-cell lymphoma, and positive expression of FOXP1 indicates a poor prognosis, especially in germinal center diffuse large B-cell lymphoma.

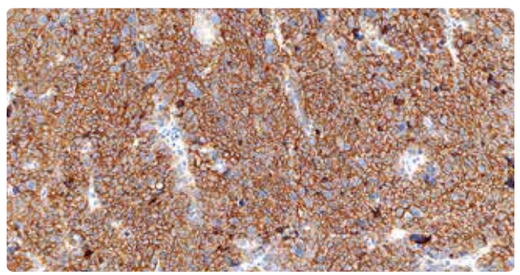


FRα

IVD

- HIER
- Clone BN3.2
- Membrane/cytoplasm
- Cat.No. GT2262

FRα (Folate Receptor alpha) is a glycosyl phosphatidylinositol European protein, which is low expressed in normal tissues and high expressed on the membrane surface of tumor cells, including FR-α, FR-β and FR-γ. FR-α is highly expressed in mucinous carcinoma, and FR-α is highly expressed in mucinous carcinoma. Among them, FR-α is highly expressed in mucinous carcinomas, including ovarian adenocarcinoma, uterine adenocarcinoma, cervical adenocarcinoma, testicular choriocarcinoma and some brain tumors, and a small amount of it is expressed in kidney, colon and heart cancers.

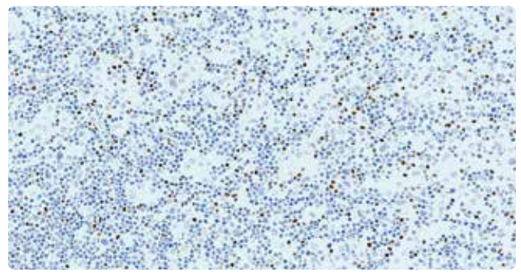


FOXP3

IVD

- HIER
- Clone 236A/E7
- Nucleus
- Cat.No. GT2464

FOXP3, a member of the forkhead transcription factor family, is considered as the hallmark molecule of regulatory T cells (Tregs). It regulates the activity of Tregs by directly regulating a variety of genes. FOXP3 is abnormally expressed in a variety of tumor cells, and is closely related to the occurrence, development and prognosis of tumors. For example, in lung adenocarcinoma, gastric cancer and breast cancer, patients with high expression of FoxP3 generally have poor prognosis.

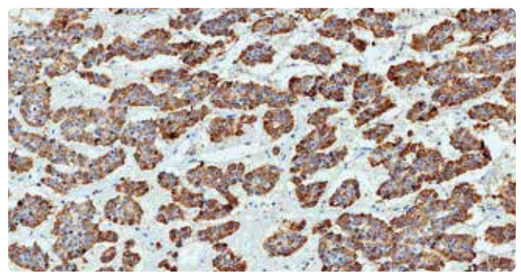


FSH

IVD

- HIER
- Clone FSH03
- Cytoplasm
- Cat.No. GT2175

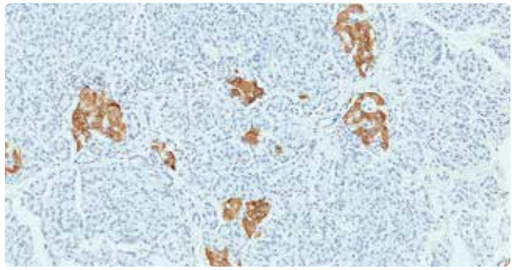
FSH is a hormone secreted by the pituitary gland that promotes follicle maturation and estrogen production. This antibody can be used for the functional classification of pituitary adenomas and the differential diagnosis of primary and metastatic pituitary tumors.



GAD2

- HIER
- Clone MSVA-602M
- Cytoplasm
- Cat.No. GT2597

Glutamate decarboxylase 2(GAD2), also known as GAD65, is a key enzyme in neurotransmitter metabolism that catalyzes the decarboxylation of glutamate to γ-aminobutyric acid (GABA). GABA is the most important inhibitory neurotransmitter in the central nervous system. It plays a key role in regulating neuronal excitability and maintaining the balance between excitation and inhibition in the brain. In the pancreas, GAD2 plays a role in the insulin-producing beta cells of the pancreatic islet. GAD2 expression is almost exclusively restricted to the brain and pancreas, which makes GAD2 a highly specific marker for pancreatic neuroendocrine tumors.

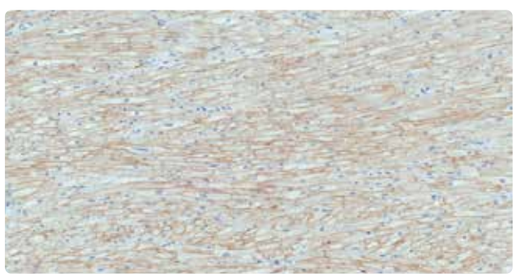


Gamma Sarcoglycan

IVD

- HIER
- Clone GR517
- Membrane/cytoplasm
- Cat.No. GT2511

Gamma Sarcoglycan is one of several sarcolemma transmembrane glycoproteins that interact with dystrophin. The dystrophin glycoprotein complex (DGC) spans the sarcolemma and provides a structural link between the subsarcolemmal cytoskeleton and the extracellular matrix of muscle cells. Defects in γ-myoglycan cause early-onset autosomal recessive muscular dystrophy, particularly limb-girdle muscular dystrophy type 2C.

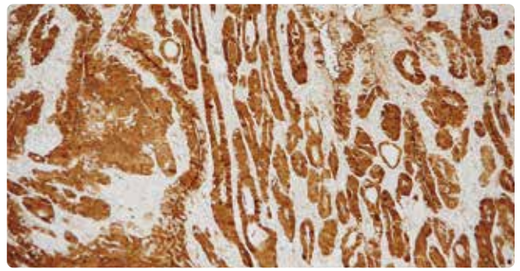


Galectin-3

IVD

- HIER
- Clone B2C10
- Cytoplasm/nucleus
- Cat.No. GT2267

Galectin-3, a member of the β-galactosidase binding lectin family, is involved in the adhesion between similar cells. Galectin-3 is mainly used in the differential diagnosis of anaplastic large cell lymphoma (+) and Hodgkin's lymphoma (-), and can also be used in the study of tumor adhesion and metastasis.

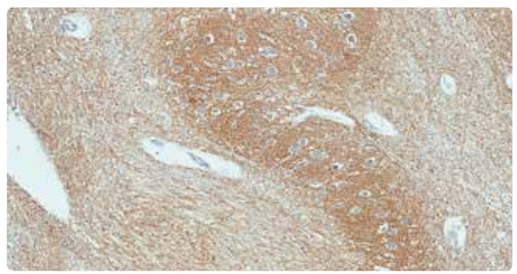


GAP43

IVD

- HIER
- Clone GR508
- Membrane/cytoplasm
- Cat.No. GT2498

Growth associated protein-43 (GAP-43) is an axonal membrane protein. It is a neuron-specific protein that participates in extracellular growth of nerve cells, synapse formation and nerve cell regeneration. GAP43 is highly expressed during neuronal development and regeneration. It can regulate axon elongation and change cell morphology. As an intracellular signal, GAP43 can greatly enhance the trafficking of G protein-coupled receptors.

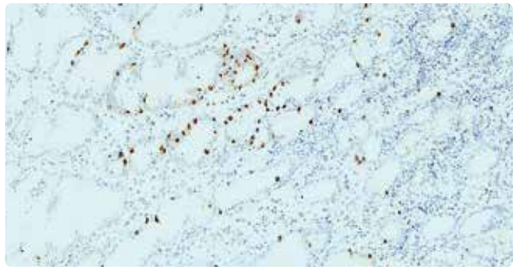


Gastrin

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GA0568

"Gastrin is distributed in the mucosal cells of the antrum (pylorus) of normal human tissues, the duodenal glands, and the Brenner glands." This antibody is mainly used to label gastrin-producing cells and their similar cells and related tumors, which is helpful for the diagnosis and research of gastrinoma and G cell hyperplasia.

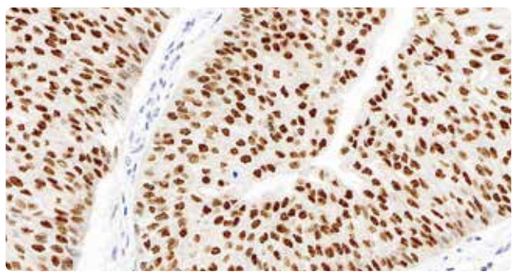


GATA3

IVD

- HIER
- Clone EP368
- Nucleus
- Cat.No. GT2187

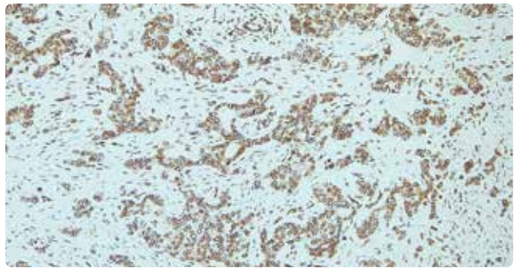
GATA3 is a zinc-finger transcription factor that plays an important role in promoting and directing cell proliferation, development and differentiation in many tissues and cell types. GATA3 plays an important role in the differentiation of breast epithelium, urothelium and T lymphocyte subtypes. GATA3 was positively expressed in primary and metastatic breast ductal and lobular carcinomas, urothelial carcinomas, basal cell carcinomas, trophoblastic tumors and endodermal sinus tumors.



GATA2

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2320

"Gastrin is distributed in the mucosal cells of the antrum (pylorus) of normal human tissues, the duodenal glands, and the Brenner glands." This antibody is mainly used to label gastrin-producing cells and their similar cells and related tumors, which is helpful for the diagnosis and research of gastrinoma and G cell hyperplasia.

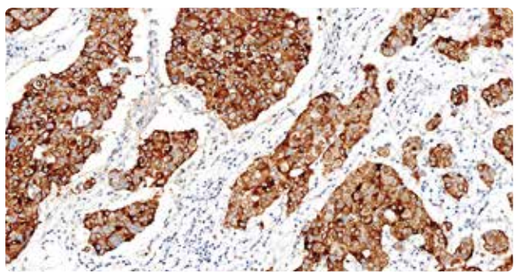


GCDFP-15

IVD

- HIER
- Clone GM314
- Cytoplasm
- Cat.No. GT2049

GCDFP-15 is a single-chain protein with a molecular weight of 15kDa, which is commonly found in vesicular fluid of vesicular diseases. It has been found that GCDFP-15 is a highly specific and sensitive marker of breast cancer, which can be used for the differential diagnosis of breast cancer. In combination with CK7 and CK20, GCDFP-15 can be used to differentiate primary or secondary extramammary Paget's disease.

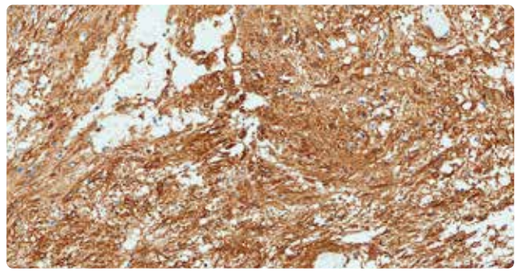


GFAP

IVD

- HIER
- Clone GA5
- Cytoplasm
- Cat.No. GT2124

GFAP is an intermediate filament protein with a molecular weight of 51kDa. "It is positive in normal, reactive, and neoplastic astrocytes, ependymal cells, and oligodendrocytes, but negative in ganglion cells, neurons, fibroblasts, and tumors derived from these cells." It is mainly used in the diagnosis and differential diagnosis of central nervous system tumors such as astrocytoma.

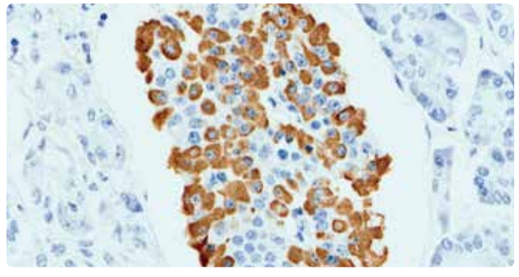


Glucagon

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GA0565

Glucagon is a hormone synthesized and secreted by the alpha cells of the pancreatic islet that promotes the breakdown of glycogen into glucose while inhibiting glycogen synthesis, resulting in increased blood glucose. It is commonly used to detect glucagonoma and neuroendocrine tumors.

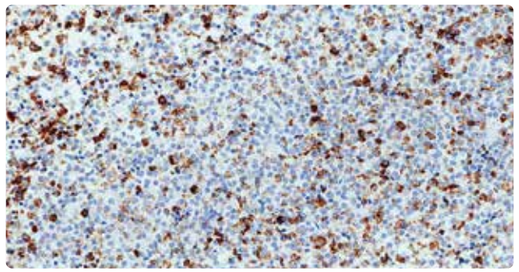


GH

IVD

- HIER
- Clone GM318
- Cytoplasm
- Cat.No. GA0570

Growth Hormone (GH) is a hormone synthesized and secreted by growth hormone cells in the anterior pituitary gland, which can promote protein synthesis and bone development. The antibody weakly cross-reacts with hormones such as prolactin, TSH, LH, and FSH. It can be used to label the growth hormone secreting cells and their tumors of normal pituitary gland, and also to study the functional classification of pituitary adenomas.

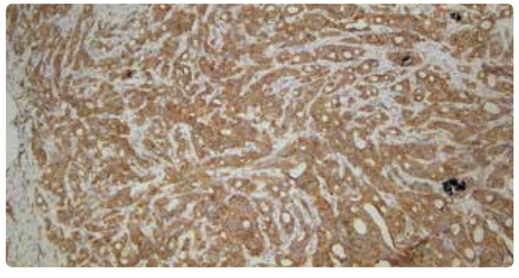


GLUT-1

IVD

- HIER
- Clone poly
- Membrane
- Cat.No. GT2181

Glut-1 (type Ⅰ glucose transporter), the prototype member of the GLUT superfamily, is a membrane-associated erythrocyte glucose transporter. It is the major glucose transporter in the mammalian blood-brain barrier and also mediates glucose transport in vascular endothelial cells, adipose tissue, and myocardium. GLUT-1 is expressed in many normal tissues such as colon, lung, stomach and breast, but its expression is increased in malignant tissues. Colorectal cancer is strongly positive for GLUT-1. GLUT-1 can be used to differentiate reactive mesothelial hyperplasia from malignant mesothelioma and endometrial hyperplasia from adenocarcinoma. The increased expression of GLUT-1 is related to the degree of malignancy and invasiveness.

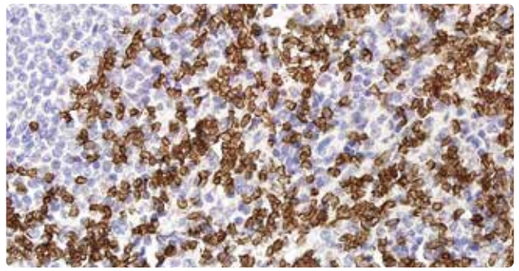


Glycophorin A

IVD

- HIER
- Clone JC159
- Membrane
- Cat.No. GT2202

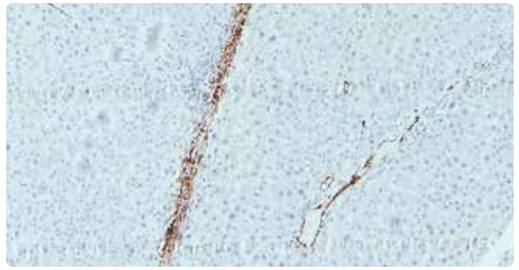
Glycophorin A (Glycophorin A), also known as CD235a, is a sialoglycoprotein located on the surface of human red blood cells and is a specific carrier of M and N blood groups. CD235a is a erythrocyte-specific antigen, and its expression accompanies the whole process of erythropoiesis. Maintaining high expression on each red blood cell indicates that the red blood cell is mature. Most of the neoplastic nucleated erythrocytes in erythroleukemia express CD235a, whereas glycogroup A is hardly expressed in acute myeloid leukemia and acute lymphomatous leukemia. Therefore, glycoprotein A is mainly used for the auxiliary diagnosis of erythroleukemia and the identification of erythroid leukemia.



GM-CSF

- HIER
- Clone 8G5
- Cytoplasm
- Cat.No. GT2303

Granulocyte-macrophage colony stimulating factor (GM-CSF) receptor is a kind of granulocyte-macrophage colony stimulating factor (GM-CSF) receptor that can stimulate bone marrow cells to form neutrophils and macrophages. Immune cytokines that enhance the bactericidal and antitumor effects of granulocytes, monocytes, and eosinophils. Studies have shown that GM-CSF is up-regulated in a variety of malignant tumors, such as breast cancer, lung cancer, colorectal cancer, prostate cancer, and head and neck tumors, and regulates tumor growth and progression through both immune-dependent and immune-independent pathways.

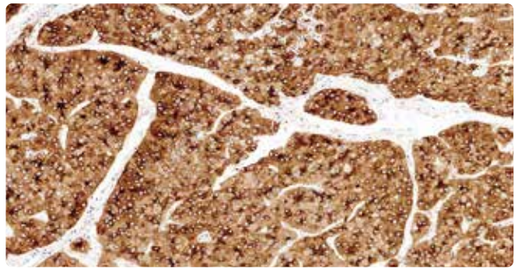


Glypican 3

IVD

- HIER
- Clone 1G12
- Cytoplasm
- Cat.No. GT2068

Glypican-3 (Glypican-3, GPC3) is a carcino-embryonic protein, which is expressed in fetal liver, kidney and trophoblast cells, but not in other normal tissues. Glypican-3 is a sensitive and specific marker of hepatocellular carcinoma, and its expression is related to the differentiation. The worse the differentiation, the higher the positive expression. It can be used in combination with HepPar-1, CD34, CD10 and AFP in the study of hepatocellular carcinoma and liver metastases, as well as dysplastic nodules, hepatic adenoma and cirrhotic nodules. It is also highly expressed in ovarian yolk sac tumors and choriocarcinoma.

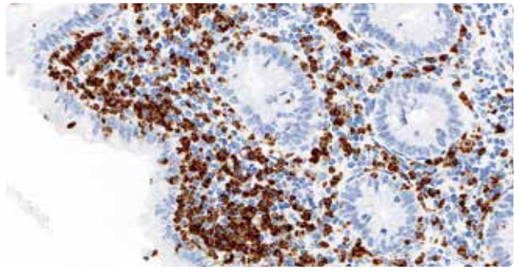


Granzyme B

IVD

- HIER
- Clone ZM66
- Cytoplasm
- Cat.No. GT2297

Granzyme B, also known as GZM-B, is a 29kDa serine protease associated with cytotoxic T cells. Granzyme B can enter target cells through transmembrane channels derived from perforin to induce DNA breakage and apoptosis. This antibody can recognize the GZM-B antigen stored in cytotoxic T cells and NK cells, and is helpful for the diagnosis and research of cytotoxic T cells, NK lymphocytes and their tumors. In addition, GZM-B was expressed in R-S cells of EBV-positive Hodgkin's lymphoma.

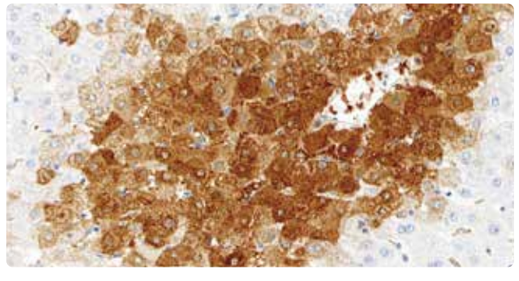


GS

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2393

Glutamine Synthetase (GS) is a catalytic enzyme that catalyzes the synthesis of glutamine from glutamate and ammonia. GS is expressed in many cells, such as astrocytes, skeletal cells, adipocytes, hepatocytes, and sperm. GS is not only involved in the recycling of neurotransmitters, but also maintains cell homeostasis, helping to maintain amino acid/energy balance, cellular REDOX reactions, etc.

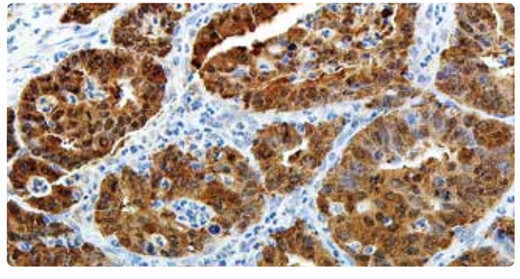


GST-π

IVD

- /
- Clone LW29
- Cytoplasm/nucleus
- Cat.No. GT2027

GST-π (glutathione S-transferase) exists in the cytoplasm and mitochondria of human cells, and is widely distributed in the whole body organs, especially in the liver and kidney. It mainly catalyzes GSH to combine with a wide range of electrophiles to form GS-X, and then discharges out of the cell to achieve detoxification. GST-π is highly expressed in a variety of tumors, which is related to tumor drug resistance (doxorubicin, cisplatin, nitrogen mustard, cyclophosphamide, etc.). Gst-π is mainly used in the study of tumor drug resistance.

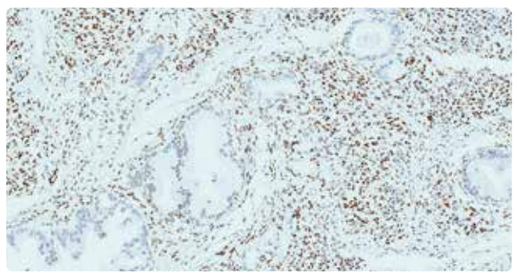


5-hmC

IVD

- HIER
- Clone RM236
- Nucleus
- Cat.No. GT2593

5-Hydroxymethylcytosine (5hmC) is an active DNA demethylation intermediate. In addition to DNA demethylation, 5hmC is also related to the malignant transformation process of tumors. The overall level of 5hmC has been found to be decreased in a variety of tumor samples, including pancreatic cancer, lung cancer, breast cancer, liver cancer, colorectal cancer, gastric cancer, esophageal cancer, kidney cancer, prostate cancer and hematological cancer, and is associated with poor prognosis. Therefore, 5hmC can be used as one of the new markers for early diagnosis and prognosis of a variety of tumor diseases.

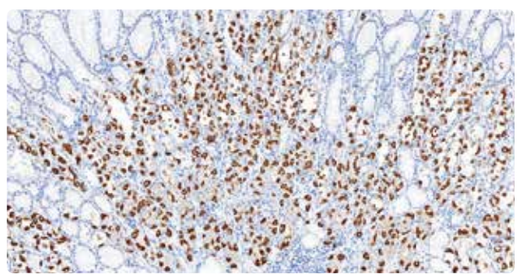


H+/K+ATPase β

IVD

- HIER
- Clone C-4
- Cytoplasm
- Cat.No. GT2541

Gastric H+, K+ -atpase (ATP4) is a membrane-bound P-type ATPase enzyme on the surface of gastric parietal cells, consisting of a high molecular weight catalytic α subunit and a smaller but highly glycosylated β subunit. This enzyme is a proton pump that catalyzes the hydrolysis of ATP and the exchange of H (+) and K (+) ions across the plasma membrane and is responsible for gastric acid secretion. The beta subunit of ATP4 is called ATP4B, and it has been reported that the decrease of ATP4B is closely related to the poor prognosis of gastric cancer patients. Decreased ATP4B is an indicator of malignant transformation of gastric mucosa and aggressive phenotype of GC. Atp4b plays an inhibitory role as a tumor suppressor in gastric cancer by regulating mitochondrial metabolism and apoptosis pathways.

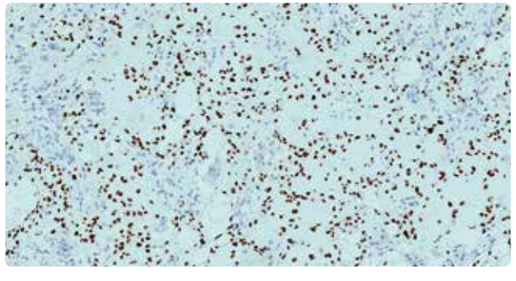


H3.3G34W

IVD

- HIER
- Clone RM263
- Nucleus
- Cat.No. GT2437

H3.3G34W (human histone H3.3) mutant-specific antibody is a highly sensitive and specific marker for the diagnosis of giant cell tumor of bone (GCTB). It is helpful to distinguish GCTB from other bone tumors with similar morphology. The limitation of this antibody is that a small number of GCTBS with G34 mutation but not G34W mutation cannot be detected.

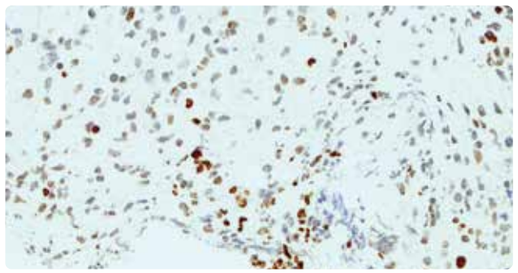


H3K27Me3

IVD

- HIER
- Clone RM175
- Nucleus
- Cat.No. GT2368

H3K27me3 is a histone methylation that occurs in the amino (N) terminal tail of lysine, the 27th amino acid of core histone H3. Trimethylation of this protein down-regulates the expression of nearby genes by forming heterochromatin regions. It has been found that the extensive down-regulation or complete loss of H3K27me3 expression can be used as a specific diagnostic marker for a variety of tumors with good specificity and sensitivity. The molecular subtypes of pediatric posterior fossa ependymomas can be distinguished by H3K27me3 histochemistry (group B is diffusely expressed, while group A is extensively decreased), which can be used to guide clinical treatment and prognosis judgment. Loss of H3K27me3 expression is sensitive and specific for the diagnosis of malignant Pschwannoma. The extensively decreased expression of H3K27me3 can assist in the diagnosis of diffuse midline gliomas with H3K27M mutation, but it cannot replace the primary diagnostic role of H3K27M mutation.

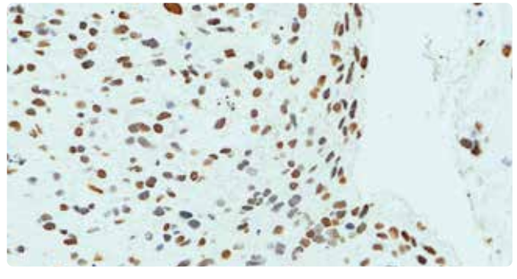


H3K27M

IVD

- HIER
- Clone RM192
- Nucleus
- Cat.No. GT2639

H3K27M mutation is the replacement of lysine 27 (K27) by methionine (M) on histone H3 (K27M). H3K27M mutation destroys the methylation modification site of histone H3, thereby changing the state of histone methylation. Diffuse midline gliomas and pilocytic astrocytomas highly express H3K27M mutation protein, and these tumors have a poor prognosis. It can be used in the study of tumor classification.

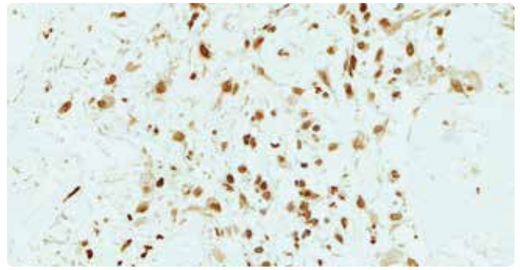


H3K36M

IVD

- HIER
- Clone RM193
- Nucleus
- Cat.No. GT2443

H3K36M is when histone H3 is mutated, resulting in the replacement of lysine at position 36 (K36) by methionine (M). K36M mutation is involved in the formation and progression of tumors by inhibiting specific histone methyltransferases (HMTs) and changing the level of epigenetic modification at the overall level of the tumor genome. Studies have shown that more than 95% chondroblastomas have H3K36M mutation, which can be used as a specific marker for the diagnosis of chondroblastomas.

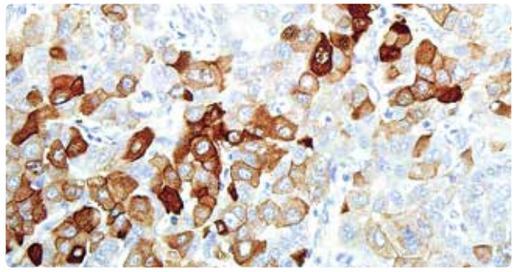


HBcAg

IVD

- /
- Clone GM502
- Cytoplasm/nucleus
- Cat.No. GB0586

Hepatitis B core antigen (HBcAg) is a viral protein encoded by the C gene of hepatitis B virus (HBV), which is the capsid protein of HBV. The positive site of HBcag is mainly in the nucleus of liver, but it can also be expressed in the perinuclear cytoplasm. It is mainly used in the research of hepatitis, liver cirrhosis and liver cancer.

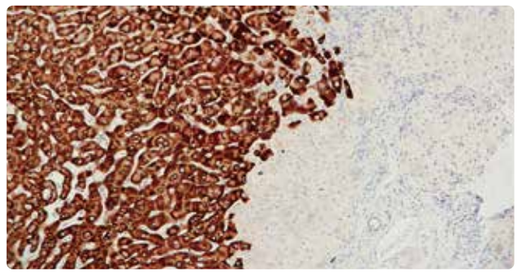


HBsAg

IVD

- HIER
- Clone GM309
- Cytoplasm
- Cat.No. GT2224

Hepatitis B surface antigen (HBsAg) is one of the markers of hepatitis B virus infection. It shows diffuse staining in the cytoplasm of infected tissues. It is mainly used to study the tissues infected with hepatitis B virus surface antigen, and can also be used in the study of the correlation between liver cirrhosis, liver cancer and hepatitis B virus infection.

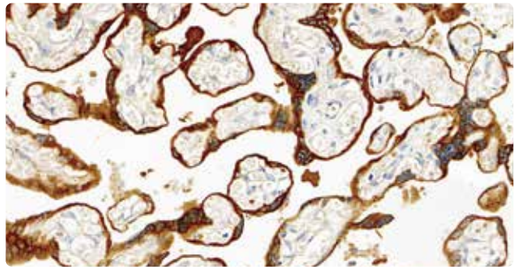


hCG-β

IVD

- Enzyme
- Clone poly
- Cytoplasm
- Cat.No. GA0231

Human chorionic gonadotrophin (HCG) is a glycoprotein synthesized and secreted by the syncytiotrophoblast cells of the normal human placenta. The antibody slightly cross-reacts with luteinizing hormone (LH). It is mainly used in the diagnosis of germ cell tumors such as hydatidiform mole and choriocarcinoma.

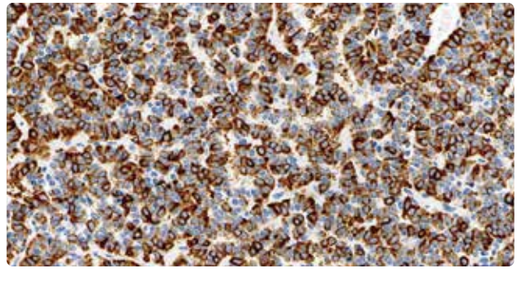


hCG-α

IVD

- HIER
- Clone 2F12
- Cytoplasm
- Cat.No. GT2370

human Chorionic Gonadotropin-α (hCG-α) is a glycoprotein hormone secreted by the trophoblast cells of the placenta. Three other glycoprotein hormones are secreted through the pituitary gland: luteinizing hormone (LH), follicle-stimulating hormone (FSH), and thyroid-stimulating hormone (TSH). It is mainly used in the diagnosis and auxiliary diagnosis of placental trophoblastic and germ cell tumors such as hydatidiform mole and choriocarcinoma.

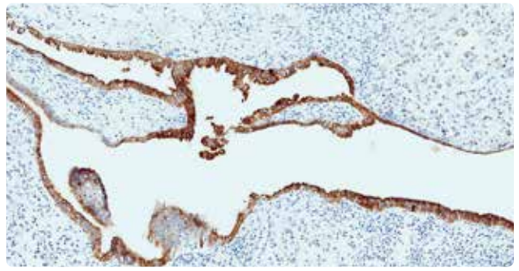


HE4

IVD

- HIER
- Clone GM306
- Cytoplasm
- Cat.No. GT2407

Human epididymis protein 4 (HE4) is a secreted protein characterized by acidic, small single-signal peptide and cysteine rich polypeptide. It belongs to the WAP domain protein family. The positive expression rate of HE4 in ovarian tissues is related to the histological type of ovarian cancer. The expression of HE4 in serous ovarian cancer is the highest, and that in mucinous ovarian cancer is negative or low. He4 was also expressed in endometrioid carcinoma and pancreatic cancer. It can be used for the diagnosis and prognosis evaluation of ovarian cancer.

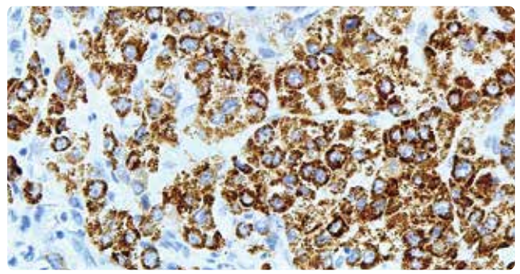


HepPar 1

IVD

- HIER
- Clone OCH1E5
- Cytoplasm
- Cat.No. GM7158

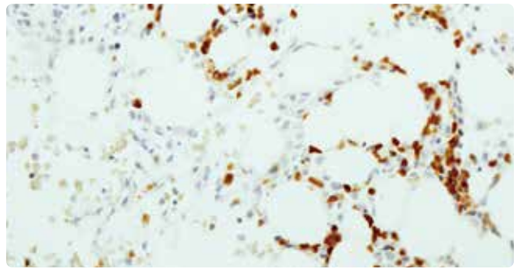
Hepatocyte, also known as Hep Par-1, is a specific marker of hepatocytes that identifies mitochondria in hepatocytes. It shows diffuse cytoplasmic staining in the liver with characteristic granular staining. The combination of Arginase-1 and Glypican-3 can be used for the differential diagnosis of primary hepatocellular carcinoma from metastatic tumors and cholangiocarcinoma.



Hemoglobin A

- HIER
- Clone EP124
- Cytoplasm
- Cat.No. GT2273

Hemoglobin A (hemoglobin A) is made up of two alpha chains and two beta chains. The hemoglobin alpha chain belongs to the globulin family and is involved in carrying oxygen from the lungs to various peripheral tissues. Localization of hemoglobin by immunohistochemical method is beneficial for the detection of immature, atypical or megaloblastic erythroid cells in bone marrow samples of myeloproliferative disorders, especially erythroleukemia. It was not expressed in myeloid cells, lymphocytes, plasma cells, histiocytes and megakaryocytes. The simultaneous detection of hemoglobin alpha chain, CD34, CD117, CD68 and MPO is helpful to distinguish reactive extramedullary hematopoiesis from malignant bone marrow tumors in the spleen.

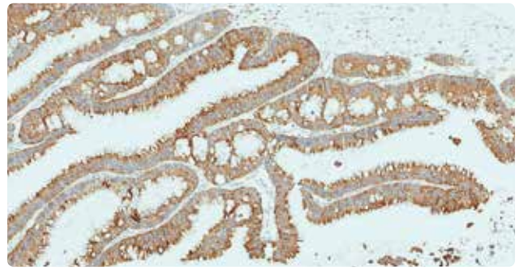


Her-3

IVD

- HIER
- Clone GR525
- Membrane/cytoplasm
- Cat.No. GT2417

Hemoglobin A (hemoglobin A) is made up of two alpha chains and two beta chains. The hemoglobin alpha chain belongs to the globulin family and is involved in carrying oxygen from the lungs to various peripheral tissues. Localization of hemoglobin by immunohistochemical method is beneficial for the detection of immature, atypical or megaloblastic erythroid cells in bone marrow samples of myeloproliferative disorders, especially erythroleukemia. It was not expressed in myeloid cells, lymphocytes, plasma cells, histiocytes and megakaryocytes. The simultaneous detection of hemoglobin alpha chain, CD34, CD117, CD68 and MPO is helpful to distinguish reactive extramedullary hematopoiesis from malignant bone marrow tumors in the spleen.

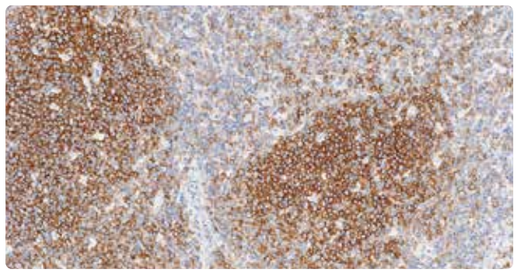


HGAL

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2335

HGAL, also known as GCET2, is a serine protease inhibitor that is expressed in lymphoid germinal centers and lung tissues in normal tissues. In tumor tissues, HGAL is not only expressed in follicular lymphoma, but also in other germinal center derived lymphomas, such as Burkitt lymphoma, DLBCL, and Hodgkin lymphoma. The expression of CD10 and bcl-6 is helpful in the diagnosis of FL.

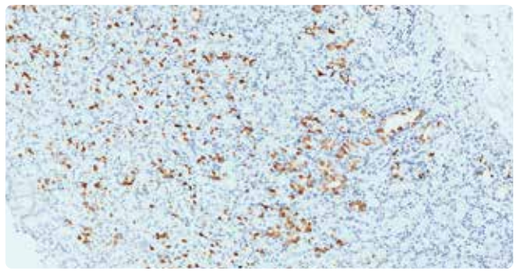


HIK1083

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2521

HIK1083 protein, also known as M-GGMC-1, is a gastric mucous cell mucin that can recognize mucin-type carbohydrate antigen containing peripheral α-linked N-acetylglucosamine. HIK1083 antigen is mainly expressed in normal gastric mucosal cells (mucosal neck cells and pyloric gland cells) and duodenal gland cells in the mammalian gastrointestinal tract. In addition, HIK1083 was also positive in minimal deviation adenocarcinoma of the cervix/cervical gastric mucinous carcinoma and cervical lobular gland hyperplasia with gastric metaplasia. Therefore, HIK1083 can be used for the diagnosis of cervical minimal deviation adenocarcinoma/cervical gastric mucinous carcinoma.

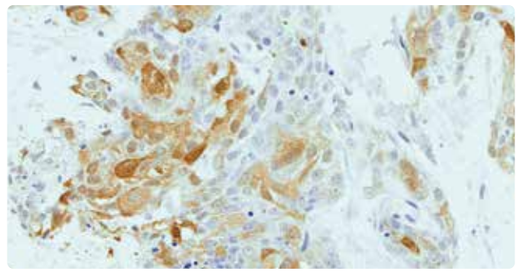


HIF-1α

IVD

- HIER
- Clone EP118
- Cytoplasm/nucleus
- Cat.No. GT2377

Hypoxia inducible factor-1 alpha (HIF-1α) is a cancer-related gene plasma protein, which is involved in energy metabolism, angiogenesis and apoptosis. It is a key transcriptional regulatory gene that mediates the adaptive response of cells to hypoxic microenvironment. It can make tumor cells avoid hypoxia-induced apoptosis and play the role of anti-apoptotic protein in hypoxic stress. It is expressed in a variety of tumors, and is often nuclear predominated in bone marrow, gallbladder, urinary tract and pancreatic tumors. Cytoplasmic staining is seen in colorectal cancer, while it is often negative in endometrial, renal, and liver cancer.

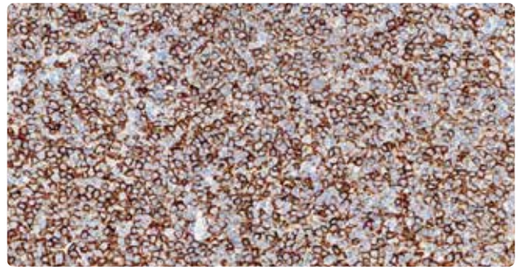


HLA-DR

IVD

- HIER
- Clone GR515
- Membrane/cytoplasm
- Cat.No. GT2382

HLA-DR is expressed on B lymphocytes, monocytes, macrophages, activated T lymphocytes, activated NK lymphocytes and human progenitor cells. "It is also expressed in thymic epithelial cells, B-lymphocyte-dependent zones of the spleen and lymph nodes, and B-lymphocyte lymphomas." It is mainly used for immunophenotyping of leukemia and determination of blast and monocytic differentiation.

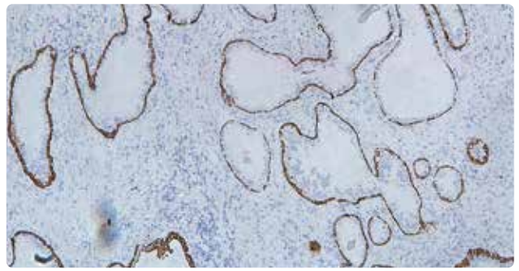


HMB-45

IVD

- HIER
- Clone HMB-45
- Cytoplasm
- Cat.No. GM0634

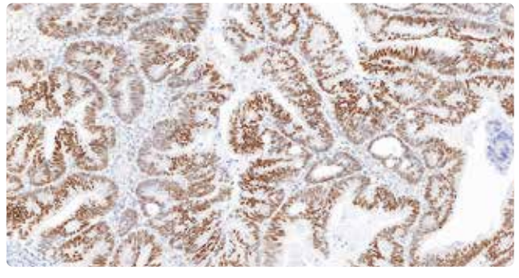
HMB-45 is a melanin-associated antigen that is mainly expressed in immature melanocytes. However, normal melanocytes and intradermal nevus cells did not express HMB-45. It is also expressed in activated and neoplastic melanocytes and other neural crest-derived tumors. It can be expressed in normal breast epithelium and some breast cancers, normal sweat glands and sweat gland-derived tumors, angiomyolipoma, and occasionally in carcinoma. It is more specific than S-100 or NKI/C3 in the diagnosis of malignant melanoma, but the sensitivity is less than 90%, especially in metastatic melanoma.



HNF4α

- HIER
- Clone EPR16885
- Nucleus
- Cat.No. GT2459

Hnf4α (hepatocyte nuclear factor 4α) is a member of the nuclear hormone receptor superfamily HNF4. It is mainly distributed in liver, kidney and enterocytes, and can regulate the expression of genes related to liver cell function. Deficiency of HNF4α causes maturity-onset diabetes mellitus type 1 (MODY1) in young adults. HNF4α can be used as a diagnostic marker for lung metastasis of colon cancer and invasive mucinous adenocarcinoma of the lung.

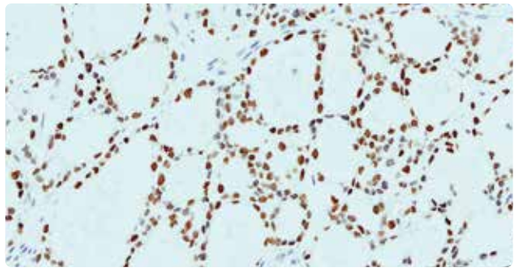


HNF1β

IVD

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2326

Hepatocyte nuclear factor 1β (HNF1β) is a transcription factor associated with multiple organs. Hnf1β plays an important role in the specific gene expression of hepatic progenitor cells, and also plays an important role in the development of nephonne function and regulation of pancreatic embryonic development. The high expression of HNF1β in ovarian clear cell carcinoma is related to the hypomethylation of CpG island in the promoter region of HNF1β gene. Therefore, HNF1β is a very good marker of ovarian clear cell carcinoma. It should be noted that HNF1β is also positive in renal clear cell carcinoma and urothelial carcinoma. In addition, HNF1β is closely related to renal cysts and diabetic syndrome.

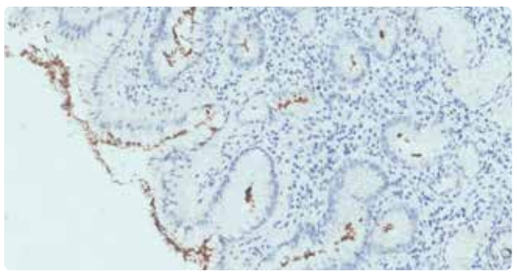


HP

IVD

- HIER
- Clone poly
- HP bacteria
- Cat.No. GB0471

Helicobacter pylori (HP) is a kind of curved gram-negative bacilli, which is associated with chronic inflammation, ulcer and gastric cancer of stomach and duodenum. The antibody is used to label Helicobacter pylori on the surface of epithelial cells and in the cytoplasm of gastric and duodenal tissues. It is useful in the study of Helicobacter pylori infect-related diseases.

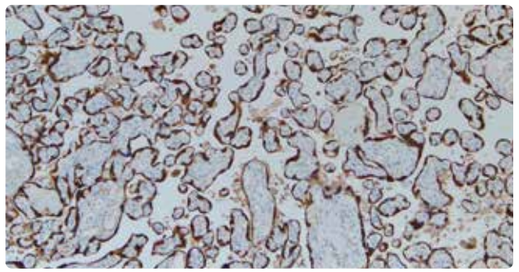


HPL

IVD

- /
- Clone GR321
- Cytoplasm
- Cat.No. GT2205

Human placental lactogen (HPL) is a polypeptide hormone synthesized and secreted by placental syncytiotrophoblast cells. It is mainly used in the diagnosis of choriocarcinoma, testicular cancer, malignant teratoma of breast cancer and ovarian cancer, and the research of a few tumors with ectopic hormone secretion (such as lung cancer).

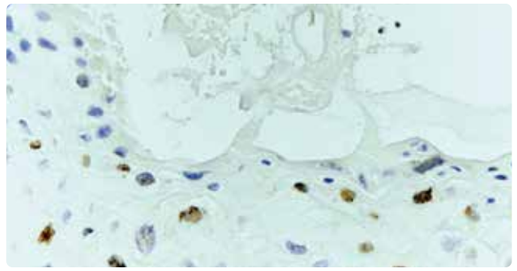


HPV

IVD

- HIER
- Clone K1H8
- Nucleus
- Cat.No. GM3528

HPV (Human papilloma virus) antibody is a broad-spectrum HPV viral marker that recognizes antigens of HPV6, 11, 16, 18, 31, 33, 42, 51, 52, 56, and 58 subtypes in human tissues. It is mainly used for the diagnosis of HPV-infected skin or mucosal lesions (such as condyloma acuminatum). Studies have shown that the positive rate of IHC for definite condyloma acuminatum is 40-50%.



HPV16/18-E6

IVD

- HIER
- Clone C1P5
- Nucleus
- Cat.No. GT2387

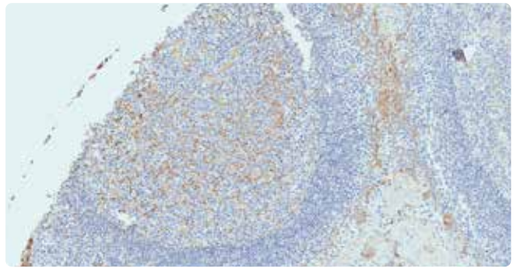
Human papillomavirus 16/18-E6 (HPV16/18-E6) is a high-risk papillomavirus, which is closely related to the occurrence of cervical cancer.

HSP27

IVD

- HIER
- Clone GR507
- Cytoplasm/nucleus
- Cat.No. GT2479

Heat shock protein 27 (HSP27), a member of the small molecular weight heat shock protein (sHSP) subfamily of the HSP family, is an important protein involved in drug resistance, cell growth, cell apoptosis, tumor occurrence and metastasis. Therefore, HSP27 may be associated with drug resistance, tumor differentiation and prognosis of patients.

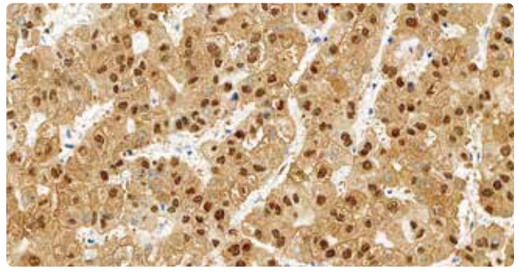


HSP70

IVD

- HIER
- Clone GR502
- Cytoplasm/nucleus
- Cat.No. GT2381

Heat shock protein 70 (HSP70) is a group of highly conserved proteins produced by all prokaryotic cells and eukaryotic cells under high temperature or stress, also known as stress proteins. Stress stimuli (including environmental, pathological and physiological stimuli, etc.) can induce the increase of intracellular HSP synthesis. Studies have found that the expression of HSP70 may be related to the occurrence, development and prognosis of tumors. It is often used in the study of hepatocellular carcinoma together with GPC3 and GS.

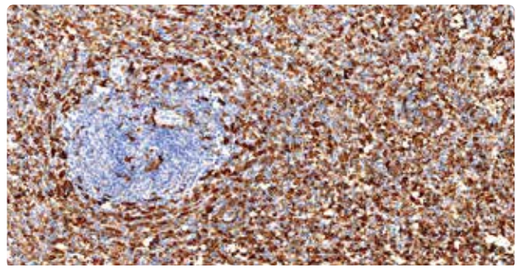


Iba1

IVD

- HIER
- Clone GR516
- Membrane/cytoplasm
- Cat.No. GT2500

Ionized calcium-binding adapter molecule 1 (Iba1) is a calcium-binding protein with a molecular weight of about 17 kDa, which is specifically expressed in microglia and is used as a marker of microglia. Iba1 is also expressed in macrophages in peripheral tissues and is therefore also known as allograft inflammatory factor 1 (AIF1). Iba1 is a cytoskeleton-binding protein that promotes membrane movement and RAC activation, and plays a role in RAC signaling and phagocytosis. Iba1 can also promote the proliferation of vascular smooth muscle cells and T lymphocytes, promote the migration of lymphocytes, and play a role in the activation and function of macrophages. Recently, microglia has been widely studied for its role in immune function in the central nervous system and its association with various diseases, such as neurodegenerative diseases, mental disorders, brain tumors and infections.

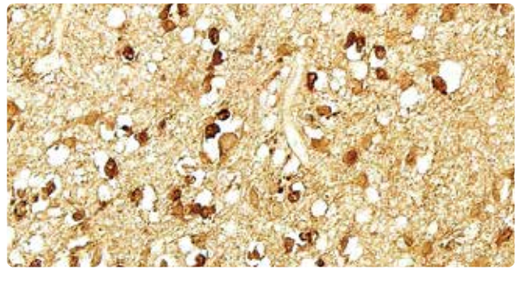


IDH-1

IVD

- HIER
- Clone H9
- Cytoplasm
- Cat.No. GT2207

The Isocitrate dehydrogenase 1 (IDH-1) missense mutation at position 132 is somatic cell specific and occurs only in certain subtypes of glioma (such as astrocytoma, oligodendroglioma and oligodendroastrocytoma, and secondary glioblastomas). It can be used as a basis for glioma genotyping. The prognosis of these gliomas with IDH-1 R132H mutation is significantly better than that of wild type gliomas. Therefore, the identification of IDH1 gene mutation is an important reference index for the pathological diagnosis and prognosis evaluation of glioma.

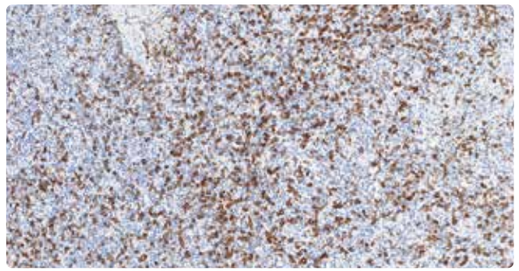


ICOS

IVD

- HIER
- Clone SP98
- Membrane/cytoplasm
- Cat.No. GT2492

ICOS (Inducible Co-Stimulator), also known as CD278, is a member of the B7-1/B7-2-CD28/CTLA-4 family of costimulatory factors. The induction of ICOS requires the involvement of both TCR and CD28 signaling. ICOS is mainly expressed on activated CD4 and CD8 cells, effector T cells and memory T cells, and is one of the targets of immunotherapy. The expression of ICOS is increased in T-cell lymphoma, especially in angioimmunoblastic T-cell lymphoma, which can be used for the diagnosis and differential diagnosis of angioimmunoblastic T-cell lymphoma.

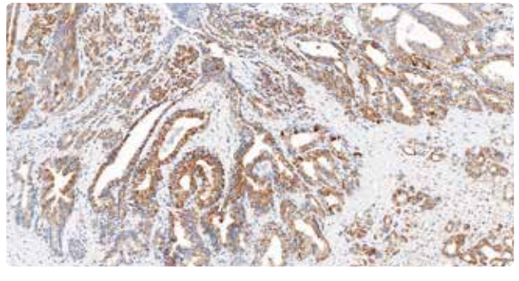


IDH2

IVD

- HIER
- Clone R172S
- Cytoplasm
- Cat.No. GT2575

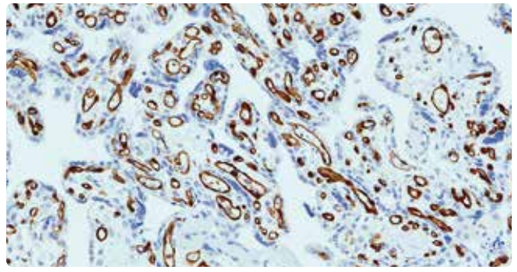
Isocitrate dehydrogenase 2(IDH2), which is mainly found in mitochondria, is expressed in various types of cells and tissues, and is involved in cellular metabolism and REDOX balance. The IDH2 gene in some cells or tumors will be mutated, resulting in mutant IDH2 enzyme. This IDH2 mutation generally occurs in the early stage of cell metabolism disorders and tumorigenesis, leading to abnormal cell metabolism and malignant growth. Recent studies on IDH2 mutation have shown that IDH2 mutation is one of the drivers of many different types of tumors, such as brain tumors, hematologic tumors, and prostate cancer.



IDO1

- HIER
- Clone GR528
- Cytoplasm/nucleus
- Cat.No. GT2296

IDO1 (indoleamine 2, 3-dioxygenase) is a heme-containing enzyme that is physiologically expressed in many tissues and cells, such as the small intestine, lung, and placenta. IDO1 is an essential component of the immune system and plays a role in the natural defense against various pathogens. It regulates the behavior of T cells through its expression in dendritic cells, monocytes, and macrophages. Recent studies have shown that IDO1 is activated during tumor development, helping malignant cells escape eradication by the immune system. IDO1 is expressed in many types of cancer, such as ovarian cancer, colon cancer, etc.

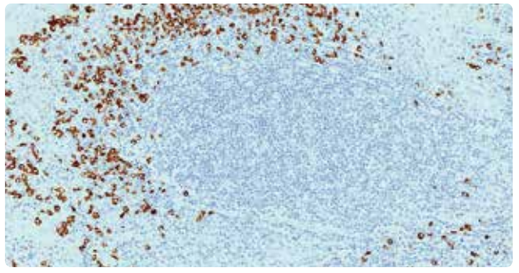


IgA

IVD

- HIER
- Clone GR310
- Cytoplasm
- Cat.No. GA0262

Immunoglobulin A (IgA) is mainly produced by mucosa-associated lymphoid tissues and plays A key role in mucosal immunity. It is present in mucosal secretions such as tears, saliva, colostrum, intestinal fluid, vaginal fluid, secretions of prostate and respiratory epithelial cells, and constitutes the first line of defense at the mucosal surface. This antibody reacts with the alpha chain of immunoglobulin IgA. "It is used in the study of multiple myeloma, lymphoma, plasmacytoma, Hodgkin's lymphoma of B cell origin and glomerulonephritis."

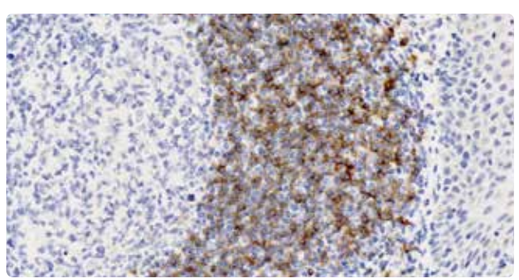


IgD

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2376

Immunoglobulin D (IgD) can be divided into two types: the biological function of serum IgD is unknown; Membrane-bound IgD (mIgD) is an important component of BCR and a marker of B cell differentiation and maturation. Immature B cells only express mIgM, while mature B cells express both mIgM and mIgD, which are called naive B cells. Activated B cells or memory B cells gradually lose mIgD. IgD is mainly expressed in plasma cell diseases and some non-Hodgkin's lymphomas. Igd is mainly used in the research of lymphoid tumors and in the diagnosis and classification of lymphoma.

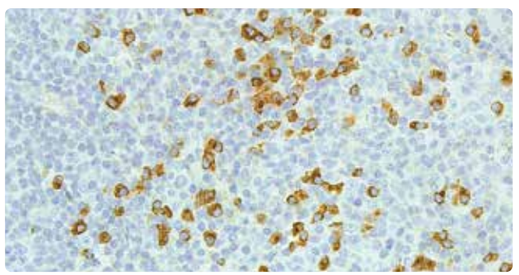


IgG

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GA0423

Immunoglobulin G (IgG) is mainly synthesized and secreted by plasma cells in spleen and lymph nodes. This antibody can react with gamma chain of immunoglobulin IgG. It is helpful in the differential diagnosis of lymphoma, plasmacytoma and Hodgkin's lymphoma of B cell origin. It can also be used for the functional classification of glomerulonephritis.

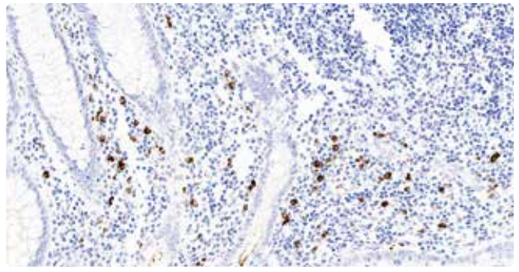


IgG1

IVD

- Enzyme
- Clone 4E3
- Cytoplasm
- Cat.No. GT2410

Immunoglobulin G1 (IgG1) is the most important subtype of IgG, which has a strong ability to activate complement and bind to phagocytes.



IgG3

IVD

- HIER
- Clone HP6050
- Cytoplasm
- Cat.No. GT2412

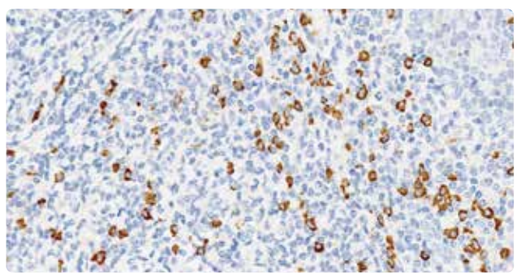
Immunoglobulin G3 (IgG3) antibody has the strongest binding ability to FcγRs, which can cause ADCC and ADCP, and the CDC effect is stronger than IgG1.

IgG4

IVD

- HIER
- Clone EP138
- Cytoplasm
- Cat.No. GT2312

Immunoglobulin G4 (IgG4) is a low-proportion IgG subtype, accounting for only 3-6% of the total IgG in normal human serum. Igg4-related sclerosing disease (IgG4-Sclerotic) is a systemic disease characterized by elevated plasma IgG4 levels, tissue fibrosis, diffuse lymphoplasmacytic (mostly IgG4+ plasma cells) infiltration, and obstructive phlebitis, which can occur in multiple sites. Therefore, IgG4 positivity can be used for the diagnosis of IgG4-related sclerosing disease.

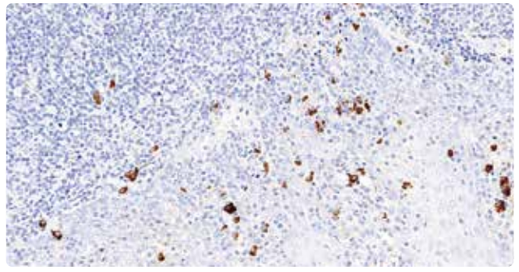


IgG2

IVD

- Enzyme
- Clone HP6014
- Cytoplasm
- Cat.No. GT2411

Immunoglobulin G2 (IgG2) is dominant in the immune response to polysaccharide antigen.

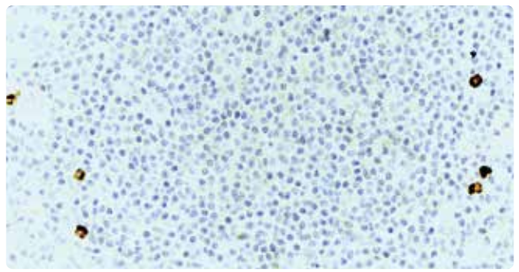


IgM

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GA0425

Immunoglobulin M (IgM) is the earliest synthesized and secreted immunoglobulin during ontogeny. This antibody can react with μ chain of IgM, which is helpful in the differential diagnosis of lymphoma, plasmacytoma and Hodgkin's lymphoma of B cell origin. It can also be used for functional classification of glomerulonephritis.

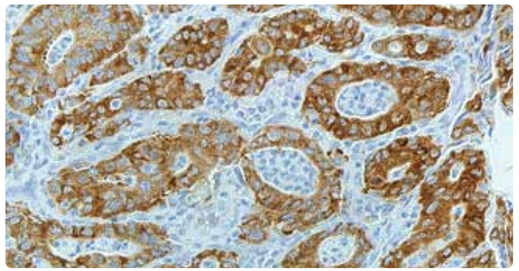


IMP3

IVD

- HIER
- Clone EP286
- Membrane/cytoplasm
- Cat.No. GT2261

IMP3 (Insulin like growth factor II mRNA binding protein 3) is a member of the insulin-like growth factor RNA binding protein family. Imp3 can bind to insulin-like growth factor II mRNA with high specificity, regulate its localization, reverse transcription and translation, and play an important role in RNA transport, stability, cell proliferation and migration. IMP3 is highly expressed in liver, lung, kidney, thymus, placenta and other tissues in the early stage of embryonic development, but rarely expressed in normal adult tissues. Imp3 is highly expressed in many malignant tumors (such as lung cancer, pancreatic cancer, ovarian cancer, colon cancer, bladder cancer, gastric cancer, breast cancer, etc.), and its expression is related to the malignancy and poor prognosis of tumors.

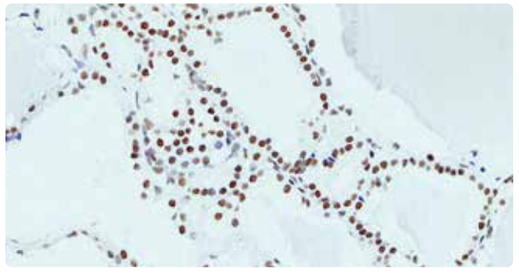


INI-1

IVD

- HIER
- Clone 25
- Nucleus
- Cat.No. GT2257

Integrase interactor-1 (INI-1) is a tumor suppressor gene that encodes the core isoform of SWI/SNF complex and is expressed in all normal cells. INI1 expression is lost due to mutation of INI1. The gene is inactivated in most malignant rhabdoid tumors (including atypical teratoma/rhabdoid tumor of the central nervous system in children) and epithelioid sarcoma. INI1 loss has also been found in renal medullary carcinoma, epithelioid malignant neurilemmoma, myoepithelial carcinoma, extraskeletal myxoid chondrosarcoma and other tumors.

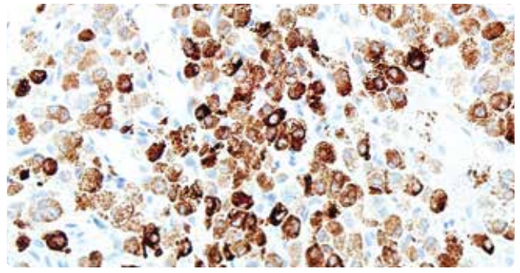


Inhibin α

IVD

- HIER
- Clone EP378
- Cytoplasm
- Cat.No. GT2302

Inhibin α (inhibin α), a glycoprotein hormone, belongs to the TCG-β superfamily, which can inhibit the synthesis and secretion of pituitary gonadotropins and play an inhibitory role in the growth of gonadal tumors. It is expressed in ovarian granulosa cells, theca cells, testicular Sertoli and Leyden cells, mammary duct and acinar epithelial cells, etc. In the adrenal cortex, the reticular zone was strongly positive, the fascicular zone was weakly positive, and the globular zone was negative. In normal breast tissue, ductal and acinar epithelial cells were positive, while myoepithelial cells were negative. Pituitary growth hormone cells were positive. inhibin α was a sensitive marker of sex cord-stromal tumors, and it was positive in granulosa cell tumor, leydig cell tumor, Sertoli tumor, Sertoli-Leydig cell tumor, steroid tumor, sex cord tumor and hermaphrodioblastoma. However, inhibin α was not expressed in fibroma, fibrosarcoma, sclerosing stromal tumor and poorly differentiated sertolist-Leydig cell tumor of the ovary. The expression of Inhibin α was weakly or focally positive in adrenocortical adenoma, and was unstable (strong positive to negative) in adrenocortical adenocarcinoma. It is mainly used in the diagnosis and differential diagnosis of sex cord-stromal tumors.

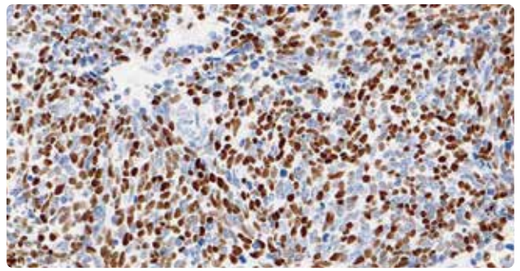


INSM1

IVD

- HIER
- Clone GR013
- Nucleus
- Cat.No. GT2468

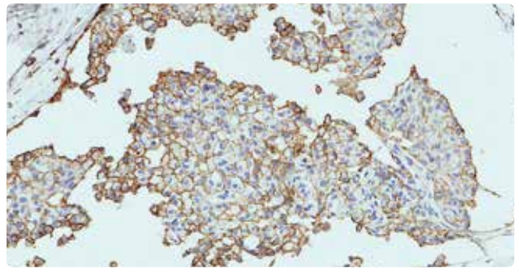
Insulinoma-associated protein 1 (INSM1) is a transcription factor with a zinc finger domain and plays an important role in neuroendocrine differentiation in a variety of tissues. Recent studies have shown that IMSM1 is highly expressed in neuroendocrine tumors and can be used as a differential diagnostic marker for neuroendocrine tumors.



JAM-A

- HIER
- Clone E8D2N
- Membrane
- Cat.No. GT2598

Junctional adhesion molecule A (JAM-A), also known as JAM-1, is a transmembrane glycoprotein located at the tight junction between epithelial and endothelial cells and belongs to the immunoglobulin superfamily. JAM-A regulates a variety of cellular processes, including tight junction assembly, epithelial-mesenchymal transition (EMT), leukocyte migration, virus binding, platelet activation, and angiogenesis. JAM-A is closely related to tumor adhesion, invasion and metastasis by inducing adhesion between homotypic cells through the activation of tight junctions. Studies have shown that JAM-A is abnormally highly expressed in tumor specimens of breast cancer patients and indicates poor prognosis.

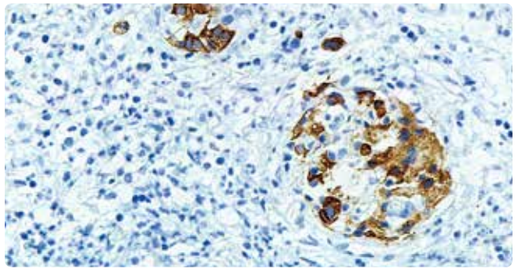


Insulin

IVD

- /
- Clone 2D11-H5
- Cytoplasm
- Cat.No. GT2131

Insulin (insulin) is a hormone secreted by human pancreatic β cells. It promotes the uptake and utilization of glucose by tissue cells, promotes glycogen synthesis, and lowers blood glucose. This antibody is mainly used in the functional classification of islet cell tumors.

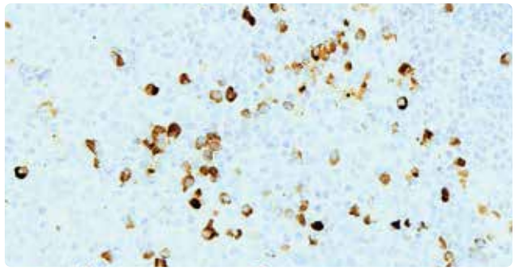


Kappa Light Chain

IVD

- HIER
- Clone L1C1
- Membrane/cytoplasm
- Cat.No. GT2247

Kappa Light Chain (κ light chain) is an IgG light chain, which is expressed in B cells, plasma cells and immunoblastic cells. It is mainly used in the differential diagnosis of lymphoma and reactive hyperplasia of lymph nodes.

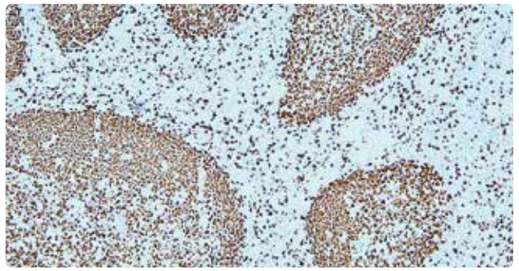


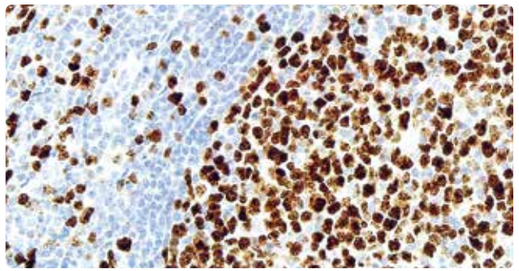
Ki-67

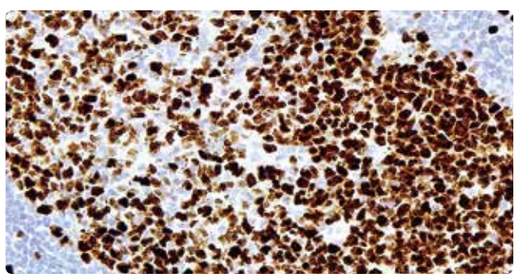
IVD

- HIER
- Clone MIB-1/GM027/SP6
- Nucleus
- Cat.No. GM7240/GT2094/GT2101

Ki-67 can identify cells in G1, S, G2 and M phases of cell proliferation cycle, but not in G0 phase. It can be used to judge the proliferative activity of cells and is a marker to determine the growth status of benign and malignant tissues. Studies have shown that it is closely related to the histological type, mitotic index and lymph node metastasis of breast cancer. Ki-67 is often used as an important reference index for the prognosis of some malignant tumors because it is more direct than PCNA to reflect the proliferation of cells. It is helpful to judge the malignant degree of lymphoma. Ki-67 is generally higher than 40% or 50% in high-grade lymphoma.





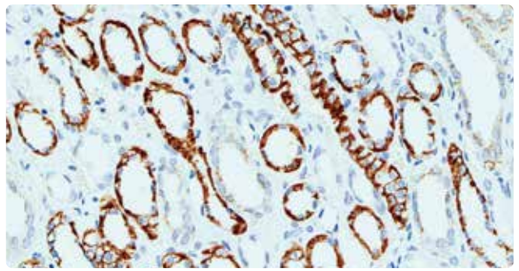


Ksp-Cadherin

IVD

- HIER
- Clone EP296
- Membrane/cytoplasm
- Cat.No. GT2378

Ksp-Cadherin, a kidney-specific cadherin, is the only cadherin family member that is exclusively expressed in kidney tissues. Ksp-Cadherin was mainly expressed in normal renal distal tubule, renal collecting duct, chromophobe renal cell carcinoma and renal oncocytoma, but low or no expression in clear cell renal cell carcinoma. Although KSP-cadherin is not expressed in epithelioid sarcoma, its expression in sarcoma may be associated with epithelioid differentiation. It was used to distinguish non-neoplastic mesothelial cells from cancer cells in the exudate (ovarian tumor cells highly express E-cadherin in the exudate); And in distinguishing mesothelioma from other tumors that lack cell adhesion (e.g., lobular breast cancer and gastric cancer, which have a high frequency of mutations). Are of some value; It has also been reported that it can be used in the differentiation of lobular and ductal breast cancer (the latter is often positive, the former is often negative).

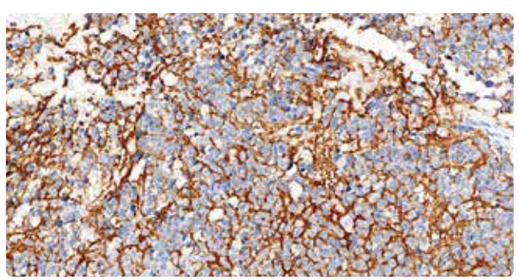


L1CAM

IVD

- HIER
- Clone GR504
- Membrane/cytoplasm
- Cat.No. GT2458

L1CAM (L1cell adhesion molecule) gene is a member of the neural cell adhesion molecule immunoglobulin gene superfamily and plays an important role in the development of the nervous system. L1CAM is expressed in a variety of tumor tissues, especially at the front end of tumor invasion, and is related to tumor stage, invasion, metastasis and other clinicopathological characteristics and poor prognosis. L1cam is considered to be an independent prognostic factor for many tumors, such as ovarian cancer and malignant melanoma.



LAG-3

IVD

- HIER
- Clone GR109
- Membrane/cytoplasm
- Cat.No. GT2528

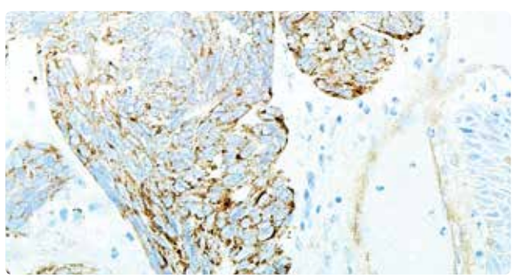
Lymphocyte activating gene 3 (LAG3, CD223) is an immune checkpoint control protein that negatively regulates T cells and immune responses. As a CD4-like member of the Ig superfamily, LAG3 is mainly expressed in activated CD4+ T cells, CD8+ T cells, plasmacytoid dendritic cells, Tregs, and NK cells, where it is activated by MHC class II molecules, its only known ligand. LAG3 is often co-expressed with PD-1 on the surface of tumor-infiltrating lymphocytes, and the two proteins act independently on tumor-mediated immunosuppression. Blockade of LAG3 is a promising strategy for tumor intervention.

Laminin

IVD

- Enzyme
- Clone Lam-89
- Basement membrane
- Cat.No. GT2222

Laminin (laminin) is an important component of the basement membrane, serving as a bridge between type IV collagen in the basement membrane and glycosaminoglycan in the surrounding matrix. In soft tissues, an intact basement membrane is formed around endothelial cells, smooth muscle, and Schwann cells. Tumor invasion and metastasis are associated with their destruction. Antibodies against laminin and laminin can be used to label the basement membrane and help to study the changes of basement membrane during tumor invasion and metastasis.

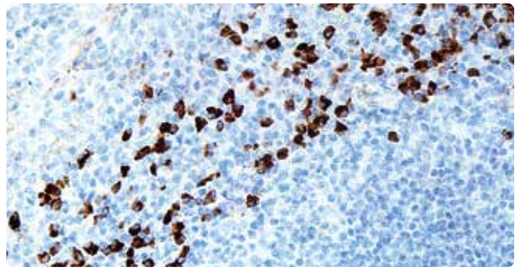


Lambda Light Chain

IVD

- HIER
- Clone HP-6054
- Cytoplasm
- Cat.No. GT2064

Lambda Light Chain (λ light chain) is an IgG light chain, which is expressed in B cells, plasma cells and immunoblastic cells. It is mainly used in the differential diagnosis of lymphoma and reactive hyperplasia of lymph nodes.

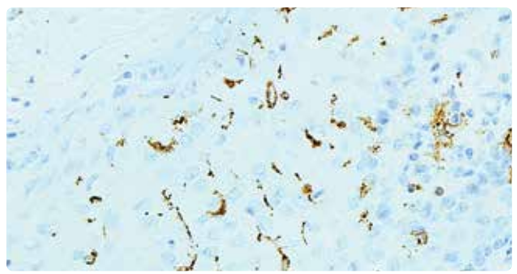


Langerin

IVD

- HIER
- Clone 12D6
- Membrane/cytoplasm
- Cat.No. GT2090

Langerin is a type Π transmembrane protein related to C-type lectins. Langerin is a Langerhans cell marker that induces the formation of Birbeck granules in Langerhans cells and is highly selective for this cell. The expression rate of Langerin in Langerhans cell histiocytosis is close to 100%. Langerin is a highly sensitive and specific marker.

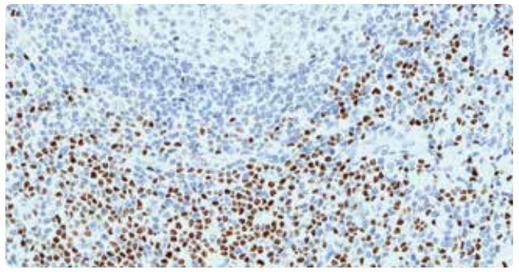


LEF-1

IVD

- HIER
- Clone EP310
- Nucleus
- Cat.No. GT2301

Lymphoid enhancer factor 1 (LEF-1) is a member of the LEF/TCF family. As a key transcription factor in Wnt/β-catenin signaling pathway, LEF-1 regulates cell proliferation and survival. Lef-1 plays an important role in lymphocyte proliferation. It is normally expressed on T cells and pre-B cells, but not on mature B cells. It is also expressed in chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), but not in other small B-cell lymphomas. "Nonspecific lymphocyte markers (often expressed in different types of cancer) that can be used to aid in the diagnosis of CLL/SLL, especially in the CD5-negative and difficult CD23 interpretation, and also to help detect microinfiltrates of CLL in the bone marrow."



LIN28

IVD

- HIER
- Clone EP150
- Cytoplasm/nucleus
- Cat.No. GT2394

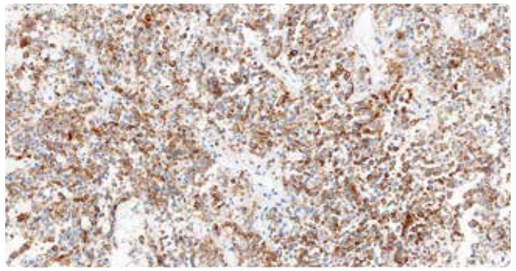
LIN28 is a highly conserved RNA binding protein, including two family members, LIN28A and LIN28B. LIN28 has been shown to be overexpressed in many different solid tumors and hematological malignancies, and may play an important role in cancer progression and metastasis. LIN28 has been found to be a sensitive and specific biomarker for the diagnosis of ovarian germ cell tumors (OGCTs). LIN28 is often used in combination with SALL4 for the differential diagnosis of germ cell tumors from non-germ cell tumors.

LH

IVD

- HIER
- Clone LH01
- Cytoplasm
- Cat.No. GT2177

Luteinizing hormone (LH) is a kind of glycoprotein gonadotropin synthesized and secreted by basophils in the anterior pituitary gland. It promotes the conversion of cholesterol into sex hormones in gonadal cells. It is mainly used in the classification of pituitary tumors and the study of multiple neuroendocrine tumors.

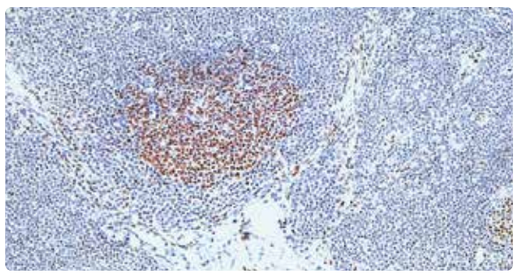


LMO2

IVD

- HIER
- Clone SP51
- Nucleus
- Cat.No. GT2192

LMO2 (LIM domain only 2) is a transcription factor. "It is expressed on normal germinal center B cells and in some lymphomas with the exception of bone marrow leukocyte precursors and endothelial cells." LMO2 was weakly expressed in mantle B cells, but not in mantle cell and marginal zone lymphomas. Lmo2 staining was localized in the nucleus. Studies have shown that LMO2 is expressed in 70% of follicular lymphomas and can be used as a useful auxiliary diagnostic marker for follicular lymphomas.

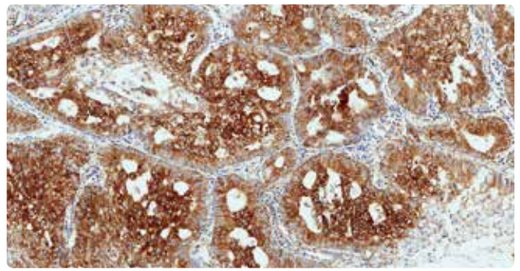


LRP

IVD

- HIER
- Clone GM311
- Cytoplasm
- Cat.No. GT2016

Lung resistance related protein (LRP) is a multidrug resistance protein, which is widely expressed in normal tissues and tumor cells. LRP mediated alkylate and platinum resistance to DNA, which could not be mediated by P-glycoprotein and MRP. This antibody specifically recognizes LRP protein, which may guide the selection of clinical drugs.

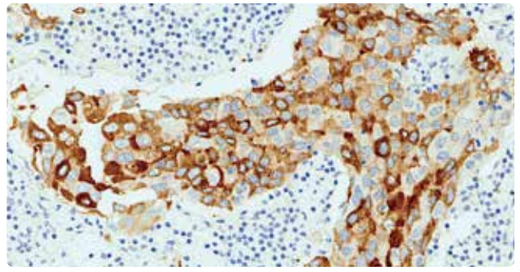


Mammaglobin

IVD

- HIER
- Clone 304-1A5
- Cytoplasm
- Cat.No. GT2050

Mammaglobin (breast globulin) is a kind of breast associated glycoprotein. It is a breast tissue specific protein. Lactoglobulin staining was localized in the cytoplasm and was focally positive in normal breast tissue. Skin exocrine sweat glands showed strong positive staining. It is a marker of breast cancer, and its specificity is stronger than that of GCDFP-15. It cross-reacts with uterine globulin, so endometrioid cancers will also be positive.

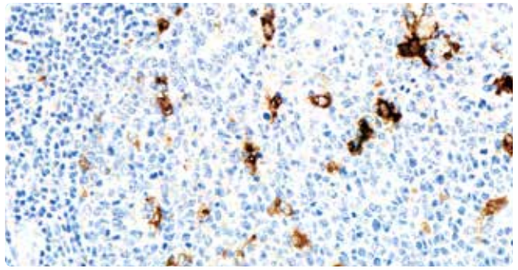


Lysozyme

IVD

- HIER
- Clone GR308
- Cytoplasm
- Cat.No. GA0099

Lysozyme is a marker of tissue cells and tumors from which they originate. This antibody is used in combination with CD68, AACT and ACT for the diagnosis of malignant histiocytic tumors and malignant histiocytosis.

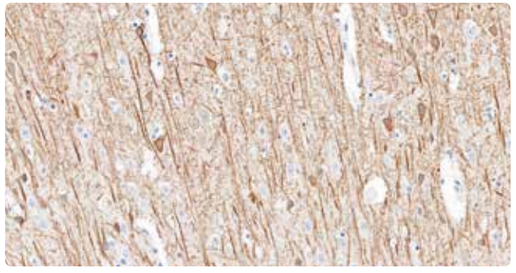


MAP 2a.b.c

IVD

- HIER
- Clone AP18
- Cytoplasm
- Cat.No. GT2413

MAP 2a.b.c (Microtubule Associated Protein 2a.b.c) is one of the most abundant proteins in the brain, which is mainly found in the cell body and dendrites of neurons. The connection between MAP 2a.b.c and microtubules promotes the stability of microtubules, and may be involved in the regulation of neuronal development, structural stability, process formation and synaptic plasticity. It is mainly used in the study of neuronal structure in normal brain tissue.

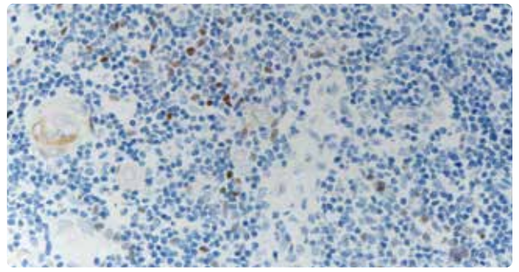


MASH1

IVD

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2414

MASH1 (Mammalian achaete-scute homologue-1) belongs to the basic helix-loop-helix family and is a key transcription factor for neuroendocrine cell differentiation, contributing to both regional and high-grade neuroendocrine carcinomas. MASH1 is expressed in normal tissues such as cerebellum, normal thyroid C cells, and thymic epithelial cells. It is also expressed in brain cancer, thymic cancer, and medullary carcinoma, such as glioma, ependymoma, and medullary thyroid carcinoma.

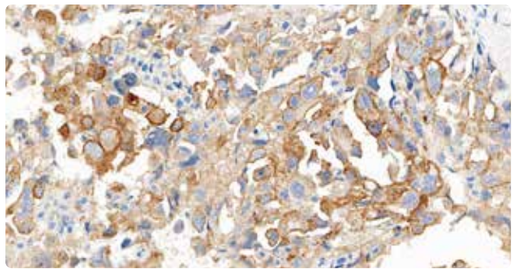


MC

IVD

- HIER
- Clone HBME-1
- Membrane/cytoplasm
- Cat.No. GM3505

MC (Mesothelial Cell) was expressed in normal mesothelium, proliferative mesothelioma and mesothelioma. MC was positive in epithelioid component of epithelial and mixed types of mesothelioma, but negative in spindle cell mesothelioma. HBME-1 is a marker for papillary thyroid carcinoma and follicular thyroid carcinoma, but not in normal thyroid tissue. Therefore, HBME-1 can be used to distinguish benign from malignant thyroid lesions. Although the epithelial mesothelial cells were positive for both membrane and cytoplasm, thick membrane staining was more diagnostic for malignant mesothelioma. MC is also useful in differentiating mesothelioma (with a higher positive rate) from adenocarcinoma (with a lower positive rate).

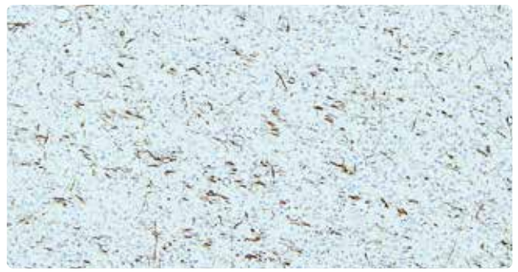


MBP

IVD

- HIER
- Clone ZM202
- Cytoplasm
- Cat.No. GA0623

Myelin Basic Protein (MBP) is the main component of myelin structural protein, which is expressed in oligodendrocytes, myelin in brain white matter, myelin in spinal cord, peripheral nerves, Schwann cells and corresponding tumors. It is commonly used in the diagnosis of neuromas, neurofibromas, paragangliomas, granular cell tumors and tumors with neural differentiation.

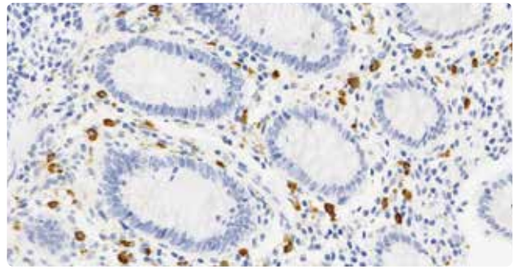


MCC

IVD

- HIER
- Clone CC1
- Membrane
- Cat.No. GT2431

Mast Cell Chymase (MCC) is an important marker of mast cells. It is one of the main proteases secreted by mast cells and an important inflammatory mediator. It is used to study the distribution of mast cells in skin, synovium, lung and heart, as well as the diagnosis and treatment of related diseases in which mast cells are involved.

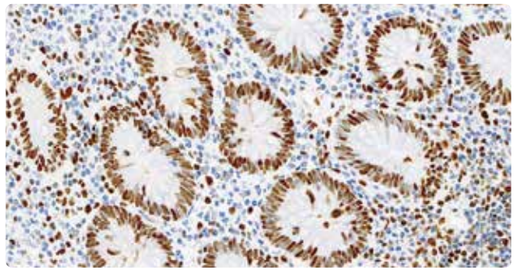


MCM2

IVD

- HIER
- Clone EP40
- Nucleus
- Cat.No. GT2316

MCM2 (Minichromosome maintenance protein2) is a major regulator of DNA replication, plays an important role in the initiation and elongation of DNA replication, and is closely related to cell proliferation. MCM2 is not expressed in quiescent cells, but expressed in proliferating and transforming cells. It is a sensitive and specific marker of cells entering the proliferative phase. The over-expression of MCM2 is related to the occurrence and development of tumors, and it is an indicator of early screening and prognosis evaluation of many tumors.

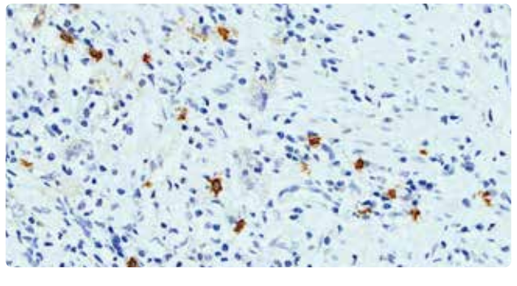


MCT

IVD

- HIER
- Clone G3
- Cytoplasm
- Cat.No. GT2221

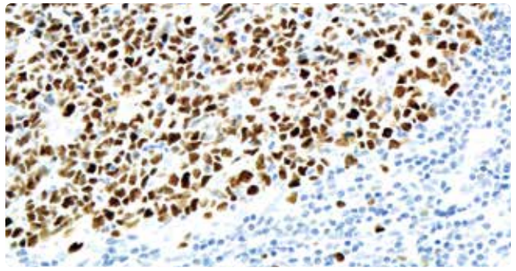
Mast Cell Tryptase (MCT) is the major neutral protease secreted by mast cells. Mast cell tryptase is the main component of mast cell secretory granules, accounting for more than 50% of the total protein content of mast cell secretory granules, and it is the most abundant protein in mast cells. Mast cell tryptase plays an important role in the pathological process of cell infection, injury and other inflammatory diseases, especially bronchial constriction asthma. It is widely distributed in respiratory tract, gastrointestinal tract, skin and other tissues. It is used in the research of respiratory system and gastrointestinal system diseases. Tryptase promotes the growth of vascular endothelial cells and destroys the extracellular matrix, which is closely related to angiogenesis and tumor growth in tumors.



MCM3

- HIER
- Clone EP202
- Nucleus
- Cat.No. GT2279

MCM3 (Minichromosome maintenance protein3) is an evolutionarily conserved DNA-binding protein that belongs to the MCM family and participates in the initiation and regulation of DNA replication process in the cell cycle. The expression of MCM3 is up-regulated in proliferative cells, but absent in terminally differentiated cells. Similar to Ki67, MCM3 is a marker of cell proliferation and is not expressed in terminally differentiated cells. In the double staining of tonsil, it was found that MCM3 and Ki67 were almost identical, but MCM3 was expressed in the middle epithelial cells, which were usually negative for Ki67. The down-regulation of MCM3 protein expression lags behind that of Ki67 in the cell cycle, that is, MCM3 has a wider expression window than Ki67, so MCM3 may be a more reliable marker of proliferation than Ki67.

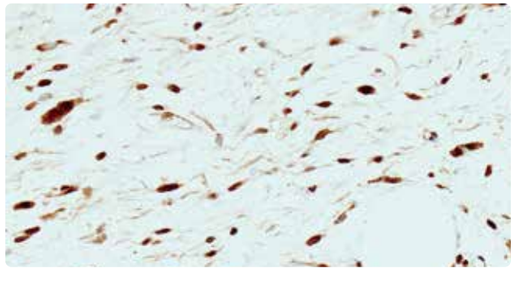


MDM2

IVD

- HIER
- Clone SMP14
- Nucleus
- Cat.No. GT2154

Murine double minute2 (MDM2) is a phosphorylated protein homolog, which can bind to mutant and wild type p53, inhibit p53-mediated transactivation, and inactivate p53. MDM2 amplification is closely related to tumor metastasis. Osteosarcomas and high-grade gliomas.

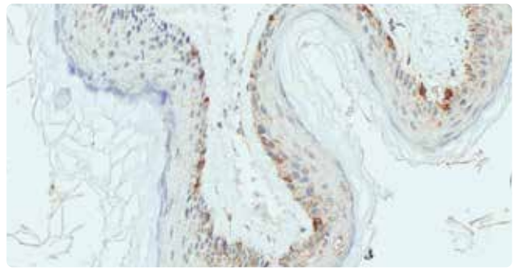


Melan A

IVD

- HIER
- Clone A103
- Cytoplasm
- Cat.No. GM7196

Melan-A, also known as MART-1 (M), is a 118-amino acid transmembrane protein, which is expressed in more than 90% of melanocytes and melanomas. In addition, Melan-A is also expressed in adrenal cortex, adrenal adenoma and carcinoma, ovarian hilum cells, ovarian sex cord-stromal tumors, testicular Sertoli cells and angiomyolipoma. Melan-a is mainly used in the diagnosis and research of melanoma.



Melanoma Pan

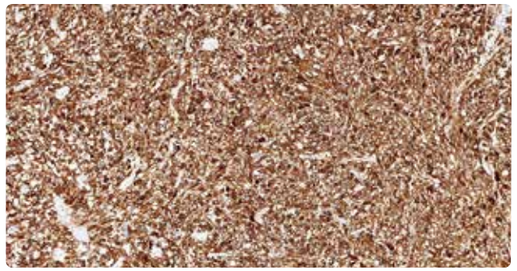
- HIER
- Clone HMB45+M2-7C10+M2-9E3
- Cytoplasm
- Cat.No. GT2584

Melanoma Pan (a mixture of Melanoma antibody with clone HMB45 and Melan-A with clone M2-7C10 + M2-9E3) is a melanoma-associated antigen found in junctional nevus and blue nevus cells of the skin. It is mainly used in the diagnosis and differential diagnosis of malignant melanoma (regardless of the presence or absence of pigmented cells) and clear cell sarcoma of soft tissue.

Melanoma gp100

- HIER
- Clone EPr4864
- Cytoplasm
- Cat.No. GT2457

Melanoma gp100 (melanoma-associated antigen gp100) is an antigen molecule that appears in the early embryonic stage and belongs to the group of melanoma-associated antigens. It is specifically expressed in melanocytes and is overexpressed during the development of melanoma. Binding to IL-2 has obvious anti-melanoma properties, so it plays an important role in monitoring the progression of melanoma and guiding the treatment.

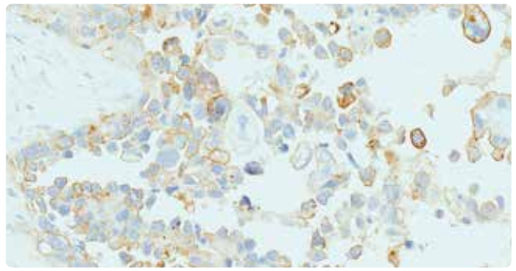


Mesothelin

IVD

- HIER
- Clone GR518
- Membrane/cytoplasm
- Cat.No. GT2291

Mesothelin (mesothelin) is a glycoprotein on the surface of mesothelial cells. It is expressed in mesothelial cells, kidney, bronchial epithelium, tonsil and fallopian tube in normal tissues. It is expressed in mesothelioma, ovarian epithelial carcinoma, some squamous cell carcinomas and adenocarcinomas. The sensitivity of the tumor to mesothelioma is 100%. If it is negative, the diagnosis of mesothelioma can be ruled out. It is overexpressed in pancreatic ductal adenocarcinoma, but negative in normal pancreas, so it is also a marker of pancreatic ductal adenocarcinoma.

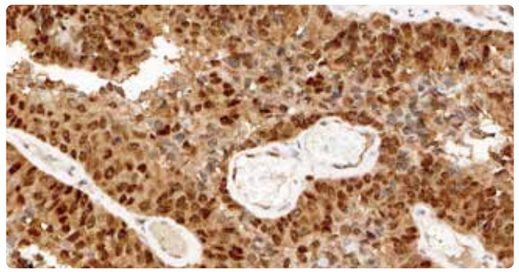


MGMT

IVD

- HIER
- Clone MT3.1/EPR4397
- Cytoplasm/nucleus
- Cat.No. GT2226

MGMT (O6-methylguanine-DNA methyltransferase) is a protease that repairs DNA alkylation damage. It is expressed in many normal tissues such as liver and breast, but low in brain tissue and bone marrow. The level of MGMT in tumor cells directly reflects the degree of DNA damage it can tolerate. It is generally believed that tumor cells with no or low levels of MGMT expression are effective to alkylating agents. Vice versa means drug resistance. It is mainly used in tumor drug resistance research.

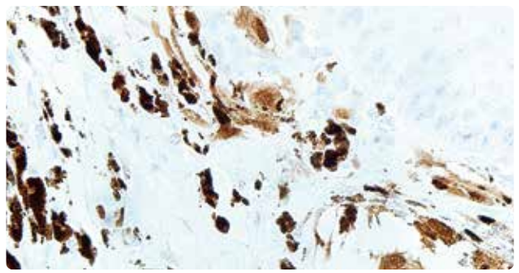


MiTF

IVD

- HIER
- Clone C5/D5
- Nucleus
- Cat.No. GT2263

Microphthalmia-associated transcription factor (MiTF) is an important transcription factor. MiTF plays a key role in the development, differentiation and function regulation of melanocytes. Mitf is not only the main regulatory protein for the growth, differentiation and pigment production of melanocytes, but also plays an important role in the malignant transformation of melanocytes and the occurrence, development and metastasis of melanoma. MiTF is also closely related to mast cells and bone development. In addition to the expression of MiTF in melanocytes and tumors, it may also be expressed in macrophages, osteoclasts and a variety of tumors. Mitf is mainly used in the diagnosis of malignant melanoma.

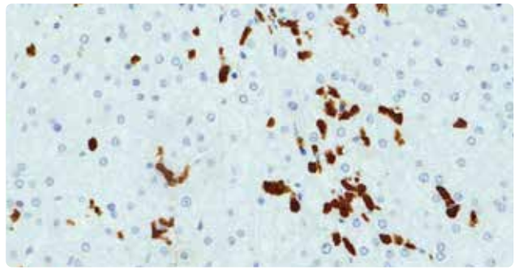


MHA

IVD

- HIER
- Clone MAC387
- Cytoplasm
- Cat.No. GT2371

MHA (Myeloid/Histiocyte Antigen) belongs to the S-100 protein family. Mha mainly marks granulocytes, monocytes and histiocytes, and is mainly used for the auxiliary diagnosis of histiocytic tumors. It can be used to label Langerhans cell histiocytosis, true histiocytic lymphoma and some anaplastic large cell lymphoma.

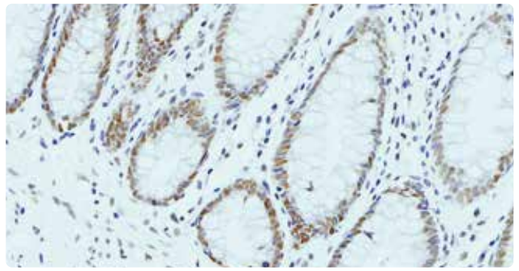


MLH1

IVD

- HIER
- Clone GM002
- Nucleus
- Cat.No. GT2304

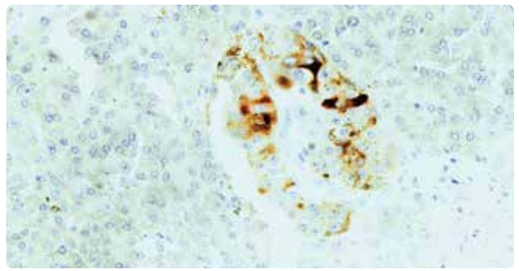
MLH1 (MutL homolog 1) is an important gene in the human mismatch repair gene family. Human mismatch repair genes play an important role in maintaining the integrity and stability of genetic information and avoiding genetic mutations. The deletion of MLH1 gene after mutation will make the cell mismatch repair function defect, lead to microsatellite instability (MSI), and make the human tumor susceptible. At present, it is used together with MSH2, MSH6, and PMS2 for Lynch syndrome screening, prognosis prediction of colorectal cancer, treatment guidance for stage II colorectal cancer, and population screening for colorectal cancer immunotherapy.



MMP-2

- HIER
- Clone 4D3
- Cytoplasm
- Cat.No. GT2265

Matrix metallopeptidase 2 (MMP-2), also known as type IV collagenase, can degrade collagen types IV, V, VII, X and gelatin type I. MMP-2 activation is mediated by the Ras signaling pathway.

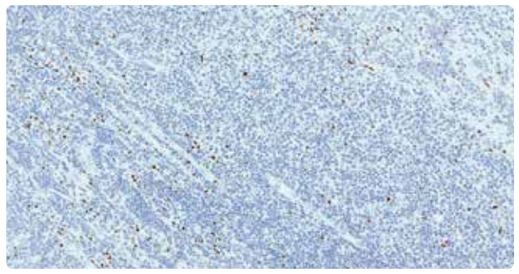


MNDA

IVD

- HIER
- Clone 253A
- Cytoplasm/nucleus
- Cat.No. GT2550

myeloid cell nuclear differentiation antigen (MNDA) is a regulatory protein involved in cell differentiation and apoptosis, which is usually highly expressed in bone marrow and monocyte lineages. MNDA gene, located on human chromosome 1q22, is a member of the HIN-200 family and plays an important role in the production of interferon. MNDA can be used in the differential diagnosis of marginal zone lymphoma and follicular lymphoma, as well as in the differential diagnosis of bone marrow tumors and plasmacytoid dendritic cell tumors.

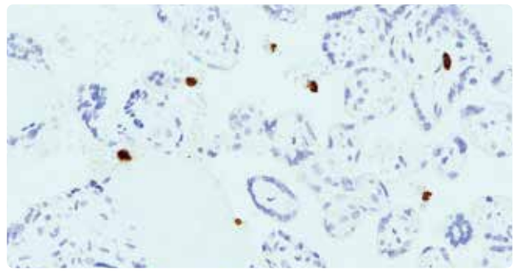


MMP-9

IVD

- HIER
- Clone EP127
- Cytoplasm
- Cat.No. GT2272

Matrix metallopeptidase 9 (MMP-9) is a zinc-dependent endonuclease that degrades basement membranes and other structural components of the extracellular matrix. MMP-9 is mainly expressed in stromal cells, including polymorphonuclear leukocytes and macrophages. In cancer tissues, invasion of tumor cells may induce the expression of stromal cells, which is not observed in cancer cells. MMP-9 is thought to play a key role in tumor invasion and metastasis as well as angiogenesis in a variety of cancers.

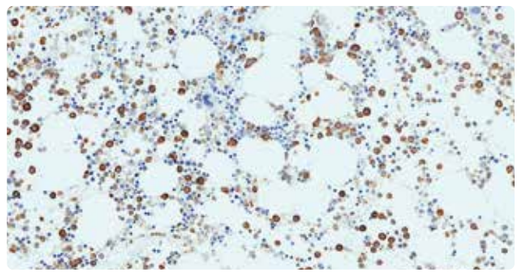


MPO

IVD

- HIER
- Clone GR305
- Cytoplasm
- Cat.No. GT2032

Myeloperoxidase (MPO) is an important enzyme in the formation of phagocytotic and lytic exosomes of granulocytes. It plays an important role in the production and regulation of inflammatory responses in the body. Mpo is mainly expressed in neutrophils and monocytes, but not in erythroid precursors, lymphoid cells, prokaryotic cells, mast cells, plasma cells, and various epithelial tumors and sarcomas. It is a sensitive and specific marker of myeloid leukemia and granulocytic sarcoma. It is mainly used in the immunophenotyping of acute leukemia and the diagnosis of granulocytic sarcoma, and can also be used in the differential diagnosis of acute leukemia and some lymphomas.

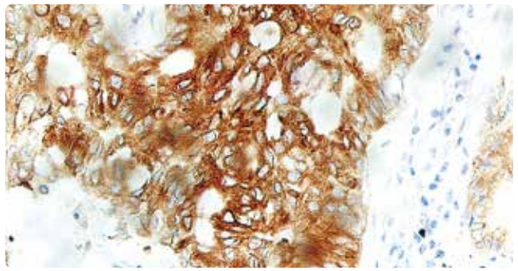


MRP1

IVD

- HIER
- Clone QCRL-1
- Cytoplasm
- Cat.No. GT2015

MRP1 (Multidrug resistance-associated protein 1) is an acid phosphorylase, which is mainly expressed in lung, colon, fallopian tube, uterus, brain, liver and pancreas. It is expressed in about 44% of ovarian cancers and 80% of breast cancers, with enhanced expression also seen in prostate cancer. It is mainly used in the study of the mechanism of multidrug resistance in tumors.

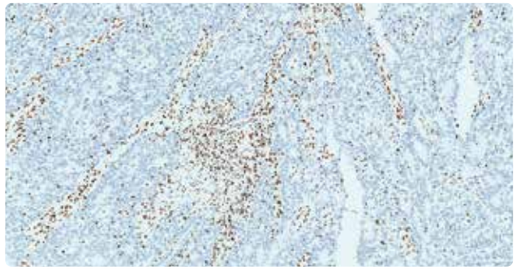


MSH2

IVD

- HIER
- Clone RED2
- Nucleus
- Cat.No. GT2310

MSH2 (MutS homolog 2) is an important gene in the human mismatch repair gene family. Human mismatch repair genes play an important role in maintaining the integrity and stability of genetic information and avoiding genetic mutations. The deletion of this gene after mutation will make the cell mismatch repair function defect, lead to microsatellite instability (MSI), and make the human tumor susceptible. At present, it is used together with MLH1, MSH6, and PMS2 for Lynch syndrome screening, prognosis prediction of colorectal cancer, treatment guidance for stage II colorectal cancer, and population screening for colorectal cancer immunotherapy.

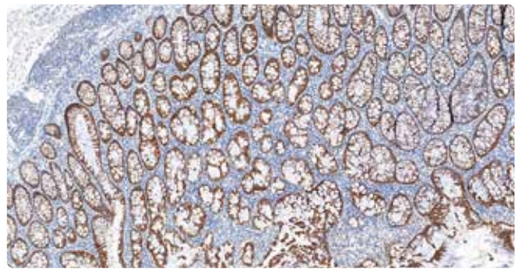


MRP3

IVD

- HIER
- Clone poly
- Membrane/cytoplasm
- Cat.No. GT2367

MRP3 (Multidrug resistance-associated protein 3) is a member of the MRP family. Mrp3 is expressed in normal epithelial cells of the digestive tract, trachea, bladder, adrenal gland and testis. It is expressed in stromal cells of various tissues and highly expressed in T lymphocytes, but not expressed in primitive hematopoietic stem cells. It is mainly used in the study of tumor drug resistance of non-P-glycoprotein MDR tumor cell lines.

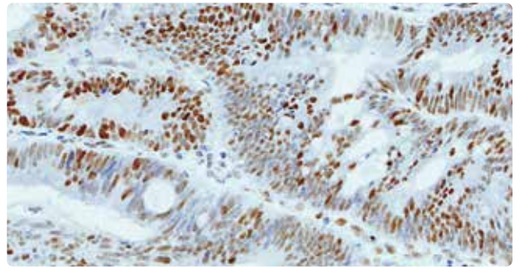


MSH6

IVD

- HIER
- Clone EP49
- Nucleus
- Cat.No. GT2195

MSH6 (MutS homolog 6) is an important gene in the human mismatch repair gene family. Human mismatch repair genes play an important role in maintaining the integrity and stability of genetic information and avoiding genetic mutations. The deletion of MSH6 gene after mutation will make the cell mismatch repair function defect, lead to microsatellite instability (MSI), and make the human tumor susceptible. At present, it is commonly used together with MLH1, MSH2, and PMS2 for Lynch syndrome screening, prognosis prediction of colorectal cancer, treatment guidance for stage II colorectal cancer, and population screening for colorectal cancer immunotherapy.



MTDH/AEG1

IVD

- HIER
- Clone EPR20797
- Cytoplasm/perinuclear
- Cat.No. GT2415

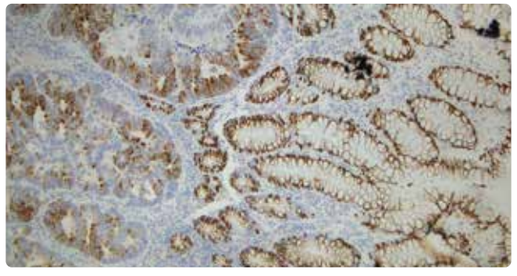
Metadherin (MTDH), also known as astrocytic elevatedgene-1 (AEG-1), is located on the q22 region of chromosome 8 and is a recently identified oncogene. MTDH plays an important role in the spread and metastasis of cancer by helping tumor cells attach to distant blood vessels. The abnormal high expression of MTDH is related to the invasion, progression and metastasis of a variety of tumors, such as breast cancer, glioblastoma, malignant melanoma, etc.

MUC-2

IVD

- HIER
- Clone Ccp58
- Cytoplasm
- Cat.No. GT2084

MUC2 (mucin 2), a member of the mucin family, is a secreted mucin associated with gastrointestinal tumors. This protein is mainly secreted by goblet cells in the colon, small intestine and respiratory tract, also known as intestinal mucus. The decreased expression of MUC-2 in colon cancer is related to the occurrence and development of colon cancer. This antibody is mainly used in the research of colon cancer.

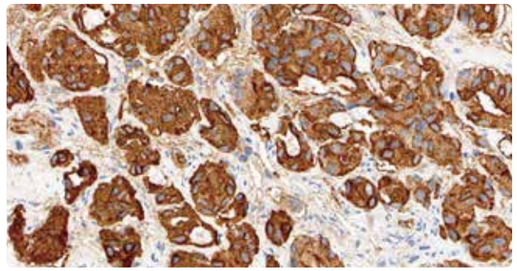


MUC-1

IVD

- HIER
- Clone GR503
- Membrane/cytoplasm
- Cat.No. GT2083

MUC - 1 (mucin 1) is also called the pleomorphic epithelial mucin (polymorphicepithelialmucin, PEM), members of the family of mucin. MUC-1 is an important tumor marker. The expression pattern of MUC-1 in tumor cells is different from that in normal cells, mainly in the following two aspects: (1) the expression of MUC-1 on the surface of tumor cells is significantly higher than that of normal cells; (2) MUC-1 showed a polar distribution on normal cells and was located in the luminal surface of glandular epithelial cells. However, MUC-1 was polarized and distributed uniformly on the surface of tumor cells. This antibody is mainly used in the diagnosis and research of breast cancer.

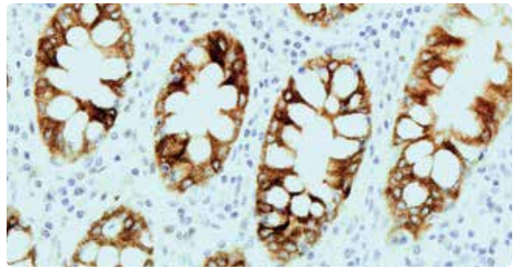


MUC-4

IVD

- HIER
- Clone 8G7
- Cytoplasm
- Cat.No. GT2275

MUC-4 (mucin 4) is a membrane-bound protein. It is expressed in a variety of epithelial cells including the lungs, bronchi, stomach, colon, and cervix. MUC4 is generally undetectable in the normal pancreas and is expressed in the vast majority of pancreatic tumors, such as pancreatic ductal adenocarcinoma. In addition, it has been reported in a variety of tumors such as gastric cancer, colon adenocarcinoma, and lung adenocarcinoma. MUC4 (Clone 8G7) was expressed with high sensitivity and specificity in low-grade fibrosarcomas, as well as in sclerosing fibrosarcoma and its related sclerosing epithelioid fibroma (78%), but not in other spindle cell tumors.

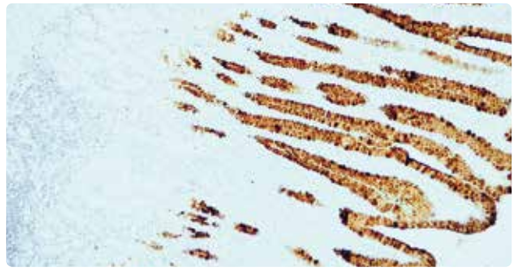


MUC-5AC

IVD

- HIER
- Clone 45M1
- Cytoplasm
- Cat.No. GT2085

Mucin 5AC (MUC5AC), also known as gastric mucus, is mainly distributed in normal gastrointestinal epithelium, colon cancer epithelium, precancerous lesions and fetal colon mucosa, but not in normal adult colon epithelium. This antibody can recognize the core peptide of gastric mucin-M1. It is mainly used in the research of gastric cancer, colon cancer and various intestinal metaplasia.

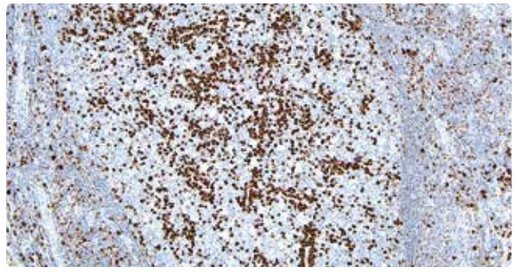


MUM1

IVD

- HIER
- Clone EP190
- Cytoplasm/nucleus
- Cat.No. GT2289

MUM1 (Multiple myeloma oncogene1) also known as interferon regulatory factor 4 (IRF4) is a lymphocyte-specific transcription factor that plays a role in gene regulation against interferons and a number of cytokines. MUM1 plays an important role in immunoglobulin gene regulation of post-center cells during B cell differentiation by contacting with follicular dendritic cells in the bright zone of the germinal center. BCL-6 expression is downregulated at this stage. MUM1 is mainly expressed in the following cells and tumors: some germinal center cells, plasma cells, activated T cells, plasmacytoma, some diffuse large B-cell lymphomas and a variety of other B-cell lymphomas, anaplastic large cell lymphomas, and a variety of peripheral T-cell lymphomas, Hodgkin's lymphomas, and malignant melanomas. "Diseases that do not express MUM1 include Burkitt's lymphoma (except for a few cases), mast-cell tumors, histiocytic tumors, and nodular lymphoid cells, the" popcorn cell "of Hodgkin's lymphoma."

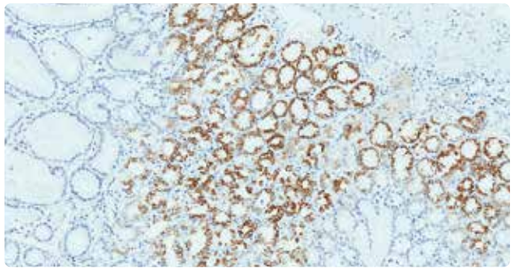


MUC-6

IVD

- HIER
- Clone ZM38
- Cytoplasm
- Cat.No. GT2220

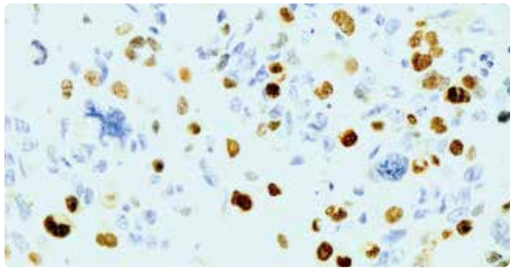
Mucin 6 (MUC6) is a kind of highly glycosylated glycoprotein, and its synthesis and secretion is one of the characteristics of glandular epithelium. Under physiological conditions, MUC2 is only expressed in normal intestinal mucosa, also known as intestinal mucus. MUC5AC and MUC6 are expressed only in normal gastric mucosa, also known as gastric mucus. MUC5AC is mainly distributed in the epithelial cells of the superficial mucosa, while MUC6 is distributed in the glandular cells of the deep mucosa. In the differential diagnosis of gastrointestinal tumors, the combined application of the three markers has a certain significance.



Myf-4

- HIER
- Clone LO26
- Nucleus
- Cat.No. GT2269

Myf-4 is homologous to Myogenin and localized in the nucleus of differentiated cells. Myf-4 is a transcription factor specific for skeletal muscle and a specific marker for rhabdomyosarcoma. It can be used for the differential diagnosis of rhabdomyosarcoma from neuroblastoma, hepatoblastoma, non-Hodgkin's lymphoma and leiomyoma.

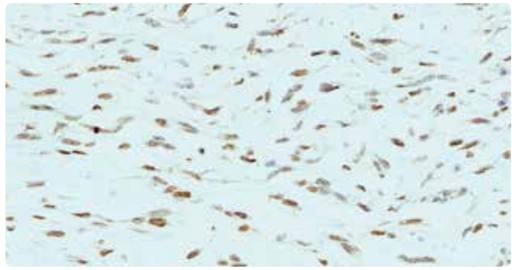


MyoD1

IVD

- HIER
- Clone EP212
- Nucleus
- Cat.No. GT2188

MyoD1 (myoregulatory protein) is a 45kDa phosphorylated protein encoded by the MyoD gene. It is only expressed in embryonic striated muscle cells, but not in normal adult striated muscle cells. It is a very sensitive and specific marker of skeletal muscle tumors. It is mainly used in the diagnosis of rhabdomyosarcoma.

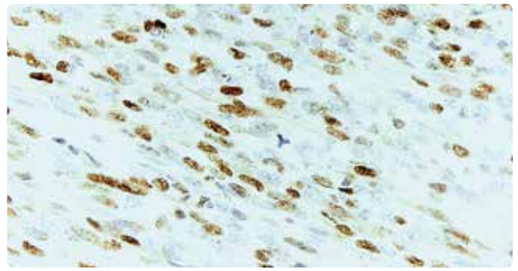


Myogenin

IVD

- HIER
- Clone EP162
- Nucleus
- Cat.No. GM3559

Myogenin, a member of the myogenic regulatory gene family, is mainly expressed in cells of skeletal muscle origin. "This antibody recognizes an antigenic determinant of the 138-158 amino acid fragment of myogenin and marks most rhabdomyosarcomas and Wilm's tumors, but not Ewing's sarcomas, neuroblastoma and mature skeletal muscle."

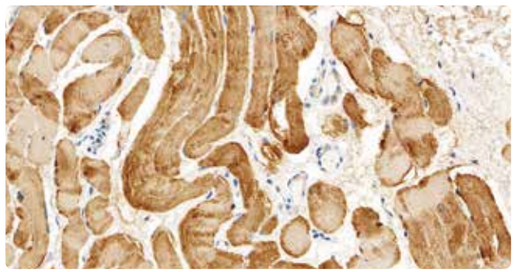


Myoglobin

IVD

- HIER
- Clone Poly
- Cytoplasm
- Cat.No. GT2031

Myoglobin is a soluble protein in the muscle plasma of skeletal muscle. It has high tissue specificity for skeletal muscle and is mainly used for the differential diagnosis of rhabdomyoblastic tumors.

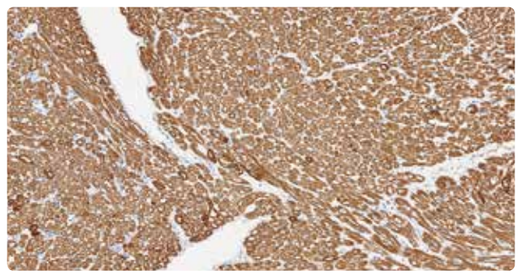


Myosin Light Chain2

IVD

- HIER
- Clone GR315
- Cytoplasm
- Cat.No. GT2496

Myosin light chain 2 (MLC 2), encoded by the MYL2 gene, has a molecular weight of about 19KDa and is mainly expressed in cardiac and skeletal muscle, but not in smooth muscle. MLC2, also known as myosin regulatory light chain 2, plays an important role in the development and function of the heart during the embryonic period. MYL2 gene mutations can affect the structure and function of myosin, leading to the development of hypertrophic cardiomyopathy, dilated cardiomyopathy and even chronic heart failure.

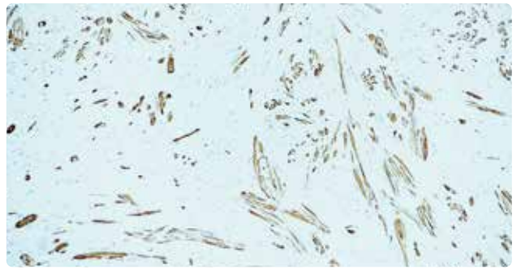


Myosin(Skeletal)

IVD

- HIER
- Clone MYSN02
- Cytoplasm
- Cat.No. GT2225

Myosin is a protein with a molecular weight of about 480kDa that can interact with actin in muscle and some non-muscle cells. Myosin is composed of two identical heavy chains (200kDa each) and four light chains (15 to 26kDa). The molecular structure of myosin is divided into rod-shaped and globular regions. Myosin aggregates into fibers through the rod region and interacts with actin and ATP through the globular region. There are different myosins in different muscle cell types due to different physiological functions, such as skeletal muscle type, myocardial type, smooth muscle type and non-muscle heterotypic myosin, etc. These myosins are classified into type I (slow type) and type II (fast type) according to their contraction rate.

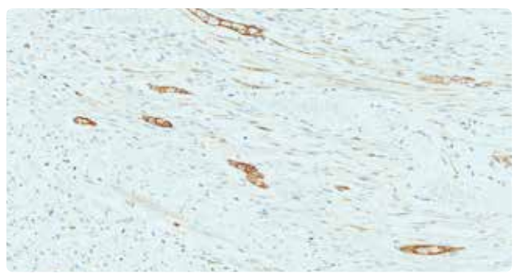


N-Cadherin

IVD

- HIER
- Clone IAR06
- Membrane/cytoplasm
- Cat.No. GT2268

N-Cadherin (neuro-cadherin), a member of the cadherin family, is able to bind calcium ions and mediate intercellular adhesion. N-cadherin is mainly expressed in nerve cells, endothelial cells, muscle cells, mesenchymal cells and some early hematopoietic cells in normal tissues. It is associated with tumor invasion, metastasis and epithelial-mesenchymal transition during tumor progression. It is expressed in a variety of tumors such as mesothelioma, chordoma, synovial sarcoma, malignant melanoma, epithelioid sarcoma, epithelioid angiosarcoma, endometrioid tumors and serous tumors of the ovary.

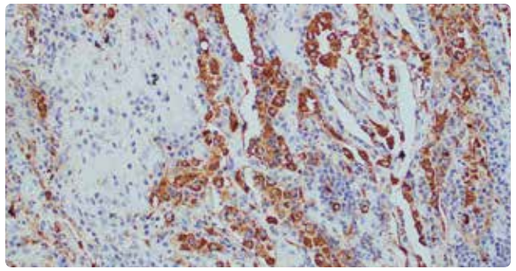


Napsin A

IVD

- HIER
- Clone GM308
- Cytoplasm
- Cat.No. GT2185

Aspartic proteinase napsin A (aspartic proteinase A) is an aspartic protease that is expressed in the cytoplasm of type II alveolar epithelial cells. Up to 80% of lung adenocarcinomas were strongly positive. However, it was not expressed in poorly differentiated and well differentiated lung cancer. Squamous cell carcinoma and small cell carcinoma were negative. 10% renal cell carcinoma and thyroid carcinoma were positive. Less than 5% of other adenocarcinomas are positive and are generally granular in the cytoplasm.

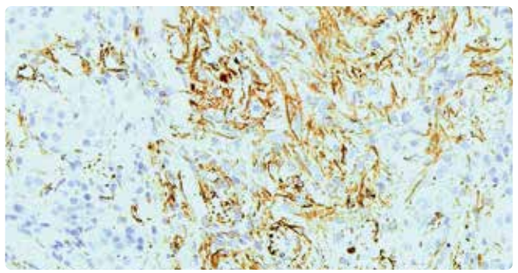


Nestin

IVD

- HIER
- Clone 10C2
- Cytoplasm
- Cat.No. GT2198

Nestin, a type VI intermediate filament protein, is expressed in the early embryonic neuroepithelial stem cells that eventually develop into the fetal central nervous system. Nestin is widely used as a major marker for stem/progenitor cells, glial cells, and endothelial tumor cells. In addition, it is an excellent marker for the differentiation of endothelial cells into neovascularization in tumors.

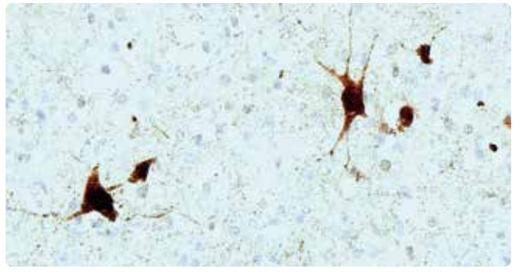


NeuN

IVD

- HIER
- Clone A60
- Nucleus
- Cat.No. GT2194

Neuron-specific nuclear protein (NeuN) is a kind of neuronal protein, It is expressed in neuronal cells of the central nervous system (including those from the cerebellum, cerebral cortex, hippocampus, thalamus, and spinal cord) and in neuronal cells of the peripheral nervous system (including those from the spinal ganglia, sympathetic ganglia, and enteric plexus), but not in Purkinje cells. It is used for the identification of neuronal cells and the diagnosis and differential diagnosis of neuronal tumors.

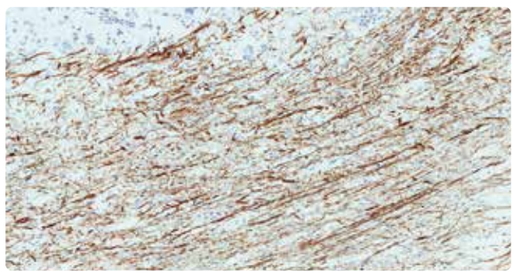


NF

IVD

- HIER
- Clone 2F11
- Cytoplasm
- Cat.No. GT2030

NF (Neurofilament protein) is a neuron-specific intermediate filament protein. It is a polymer composed of three subunits with different molecular weights, and has no cross-reaction with other intermediate filament proteins. It is mainly used to label neurons, neurites, peripheral nerve fibers, sympathetic ganglion cells, adrenal medulla and tumors from which they originate.

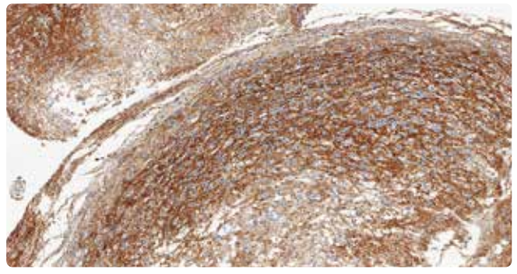


NeuroD1

IVD

- HIER
- Clone EPR20766
- Cytoplasm/nucleus
- Cat.No. GT2475

Neurogenic differentiation 1 (NeuroD1) is a transcription factor that plays an important role in the development of nervous system. NeuroD1 is highly expressed in neurons during nervous system development, but its expression level decreases with maturation. NeuroD1 can be expressed in central nervous system, glioma, small cell lung cancer, pancreatic cancer and other tumors.

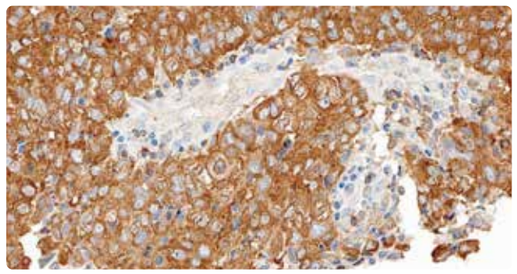


NF Kappa B/p50

IVD

- HIER
- Clone E-10
- Cytoplasm
- Cat.No. GT2384

Nuclear factor kappa-B (NF-κB) is a group of structurally related protein families, including RelA (p65), C-Rel, NF-KB1 (P50/P105), NFKB2 (P52/P100). NF-KB is composed of two subunits that belong to the Rel family in either homodimers or heterodimers. The inducible form is a heterodimer consisting of NF-κB and Rel, and the predominant one is the P50/P65 heterodimer. NF-κB is mainly involved in the regulation of antibody immune function. It can regulate the expression of many cytokines and adhesion molecule genes related to inflammatory response and immune response, and is used in the study of various diseases.

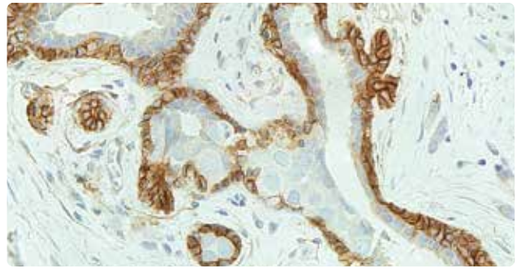


NGFR

IVD

- HIER
- Clone GR320
- Cytoplasm
- Cat.No. GT2258

NGFR (nervegrowthfactorreceptor, nerve growth factor receptor) is a kind of molecular weight is about 75 kda glycoprotein, aka NTR P - 75. The first neurotrophin receptor to be isolated is a member of the tumor necrosis factor (TNF) receptor family, which is mainly expressed in sympathetic and sensory neurons, followed by various neural crest cells or tumor cells derived from such cells (e.g. It is expressed in melanoma, malignant melanoma, neuroblastoma, pheochromocytoma, fibroneuroma and neuroinvasive nevus. Studies have shown that NGFR is a reliable marker for both desmoplastic and neurotropic melanomas. NGFR antibody can be used to label the myoepithelial cells of breast ducts and intralobular fibroblasts, which is helpful to determine the benign and malignant nature of breast lesions.

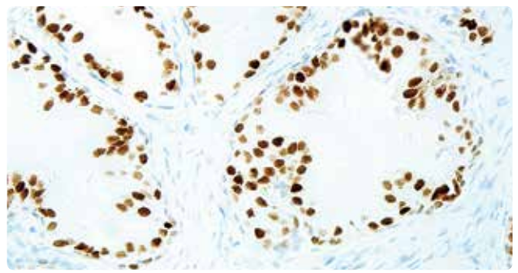


NKX3.1

IVD

- HIER
- Clone EP356
- Nucleus
- Cat.No. GT2260

NKX3.1 (NK3 Homeobox 1), as a member of the NK-3 homologous family, has a variety of isoforms. It is considered as a transcription factor and can act as a transcriptional repressor with prostate - and testis-specific expression. It may play a role in the proliferation of glandular epithelial cells and the formation of prostatic ducts. The sensitivity of NKX3.1 in identifying metastatic prostate cancer was 98.6% (68/69), while that of PSA was 94.2% (65/69). NKX3.1, together with ERG, can be used as a good antibody combination to help identify tumors of prostate origin.

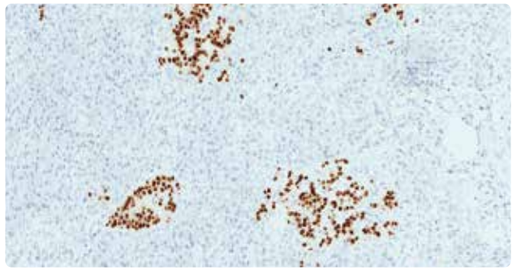


NKX2.2

IVD

- HIER
- Clone EP336
- Cytoplasm/nucleus
- Cat.No. GT2345

NKX2.2 (NK2 Homeobox 2) is a member of the NK2 family of transcription factors, and the gene encoding the NKX2.2 protein is located on chromosome 20. The NKX2.2 protein plays a crucial role in the development and differentiation of the central nervous system, gastrointestinal tract, neuroendocrine and glial. NKX2.2 is expressed in normal tissues of human brain, pancreas, pituitary and gastrointestinal tract. NKX2.2 is highly sensitive and specific for Ewing's sarcoma. It is of great significance for the differential diagnosis of small round cell tumors and can be used as a specific marker for Ewing's sarcoma.

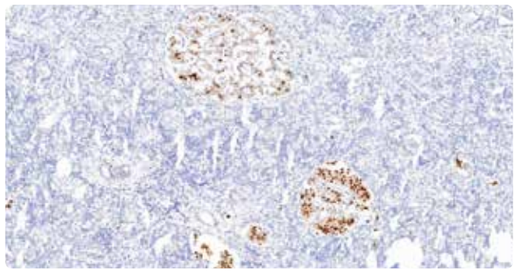


NKX6.1

IVD

- HIER
- Clone EPR20405
- Nucleus
- Cat.No. GT2520

The transcription factor related protein NKX6.1 is very important for maintaining the functional state of islet β cells. It plays an important role in controlling the biosynthesis and secretion of insulin and the proliferation of β cells. Loss of NKX6.1 function has a direct effect on the expression of genes involved in insulin synthesis and release.

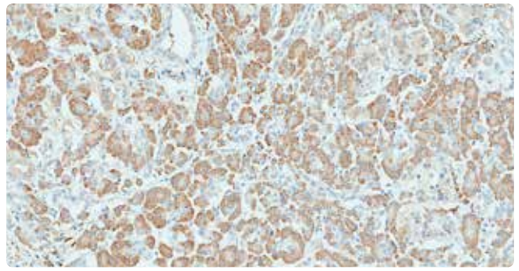


nm23

IVD

- HIER
- Clone 3706
- Cytoplasm
- Cat.No. GT2026

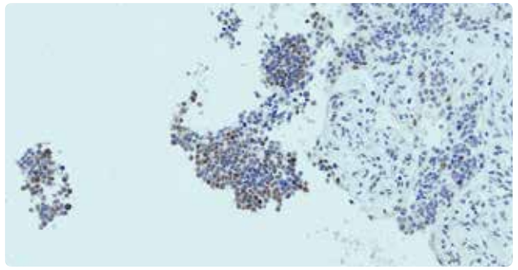
nm23 is a metastasis suppressor gene, including nm23-H1 and nm23-H2. Its encoded protein is present in almost all normal cells, and is highly expressed in well-differentiated tumor cells. However, it is not expressed or only weakly expressed in poorly differentiated and highly metastatic tumor cells. This antibody is an important index to judge the presence or absence of tumor metastasis.



n-Myc

- HIER
- Clone D4B2Y
- Nucleus
- Cat.No. GT2572

n-Myc/MYCN is a proto-oncogene associated with tumorigenesis and belongs to the Myc family. It plays an important role in embryonic development and nervous system formation. n-Myc can promote cell proliferation and metastasis, and inhibit cell differentiation, thereby making tumors more aggressive and malignant. The increased expression of n-Myc is the most common in neuroblastoma, which is closely related to the occurrence, development and poor prognosis of neuroblastoma.

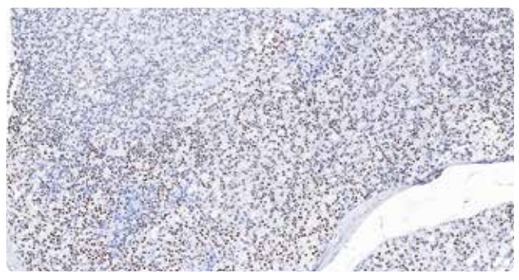


NR4A3/NOR-1

IVD

- HIER
- Clone H-7
- Nucleus
- Cat.No. GT2522

neuron derived orphan receptor 1 (NOR-1) also known as nuclear receptor subfamily 4 group A member 3(NR4A3), Nr4a3 gene was located at 9q31. NOR-1 is associated with cell proliferation, differentiation and apoptosis. NOR-1 is highly sensitive to growth factors, cytokines, lipoproteins and thrombin, and may function as a tumor suppressor gene in lymphoid hematopoietic tumors. NOR-1 can be used as a specific diagnostic marker for salivary acinic cell carcinoma, and can be used for the differential diagnosis of sinonasal acinic cell carcinoma and other sinonasal carcinomas.

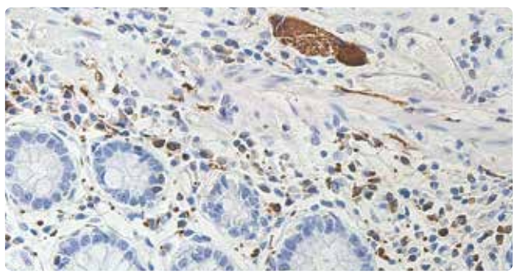


NSE

IVD

- HIER
- Clone GR319
- Cytoplasm
- Cat.No. GT2196

Neuron Specific enolase (NSE) is a RR-type pure enolase. It is divided into α, β and γ subunits, which are mainly distributed in neurons and neuroendocrine cells. This antibody is mainly used in the auxiliary diagnosis of neuroendocrine tumors. However, due to its poor specificity, it cannot be used as a single diagnostic marker at present. It should be used in combination with other corresponding markers to improve the accuracy of diagnosis.

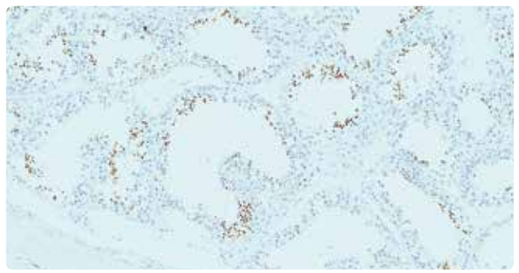


NUT

IVD

- HIER
- Clone GR011
- Nucleus
- Cat.No. GT2432

NUT is a testicular nuclear protein located at 15q14 and is normally expressed in the germ cells of the testis and ovary. NUT midline carcinoma is an aggressive tumor associated with translocation of the NUT gene. Therefore, more than 90% of NUT midline carcinomas show speckle-like staining, and this antibody is mainly used for the diagnosis and differential diagnosis of NUT midline carcinomas.

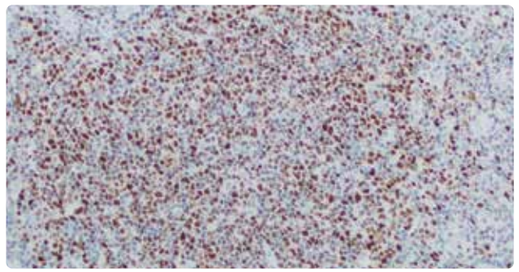


Oct2

IVD

- HIER
- Clone GM004
- Nucleus
- Cat.No. GT2323

Oct-2 (Octamer binding transcription factor 2) is a B-cell transcription factor that binds to the co-activator Bob.1 and targets the octamer motif of the immunoglobulin promoter to activate transcription of immunoglobulin genes. It plays a role in the formation of germinal centers and the differentiation of B cells into plasma cells. Normally, Oct2 is expressed at high levels in all mature B cells and at low levels in pre-B cells, T cells, and myeloid cells, and is a marker of B cell differentiation. In NLPHL, L&H cells were both Oct2 and Bob.1 positive, while in CHL, H/RSC cells were both Bob.1 and Oct2 positive. This antibody can be used in the study of hematopoietic and lymphoid diseases.

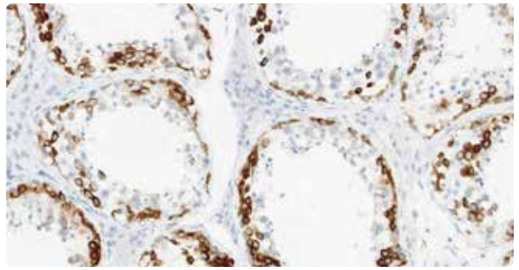


NY-ESO-1

IVD

- HIER
- Clone EPR13780
- Cytoplasm
- Cat.No. GT2516

NY-ES0-1 (New York esophageal cancer antigen 1) is the most immunogenic tumor-testis antigen known at present. It can stimulate cellular and humoral immune responses in patients with gastric cancer, and is considered to be an important marker for the diagnosis of early and advanced gastric cancer.

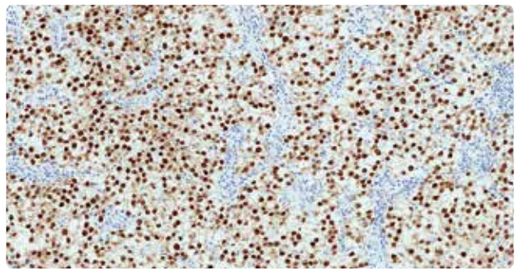


Oct3/4

IVD

- HIER
- Clone c10
- Nucleus
- Cat.No. GT2072

Oct-3/4 (Octamer binding transcription factor 3/4), a member of the POU family of transcription factors, is mainly expressed in embryonic stem cells but not in differentiated cells. It is often used in the diagnosis and research of embryonal carcinoma and germ cell tumors, such as ovarian dysgerminoma and seminoma, and is related to the prognosis of tumors. In gynecological pathology, OCT3/4 is mainly expressed in dysgerminoma of the female reproductive tract, but also in a small proportion of yolk sac tumors and a small proportion of immature teratomas.

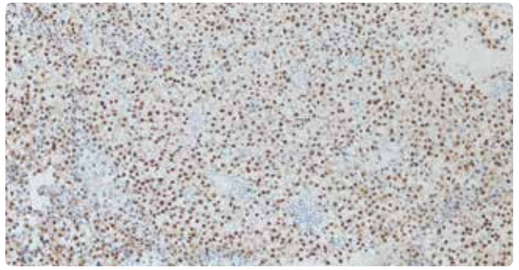


Oct4

IVD

- HIER
- Clone EP143
- Nucleus
- Cat.No. GT2397

Oct4 (Octamer binding transcription factor 4) protein contains a conserved DNA binding domain, the POU binding domain, which can bind to specific DNA sequences to regulate the transcription of downstream target genes. It is mainly expressed in embryonic stem cells (escs) and germ stem cells (escs), and plays an important role in maintaining the pluripotency of escs. Oct4 expression is downregulated in differentiated somatic cells. In tumor tissues, Oct4 is mainly expressed in germ cell tumors such as testicular germ cell tumor, seminoma and embryonal carcinoma. Oct4 antibody is mainly used in the auxiliary diagnosis of germ cell tumors.

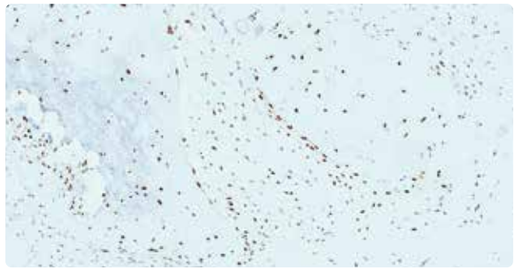


Osterix

IVD

- HIER
- Clone EPR21034
- Nucleus
- Cat.No. GT2592

Osteoblast-specific transcription factor Osterix(OSX), also known as transcription factor Sp7, is specifically expressed only in developing bone tissue and is required for osteoblast differentiation and bone formation. Studies have shown that Osterix is expressed in some bone-related tumor cells, such as osteosarcoma cells, chondrosarcoma cells and stromal cells of giant cell tumor of bone. Osterix is also highly expressed in breast cancer cells, promoting breast cancer invasion and bone metastasis, and indicating poor prognosis.

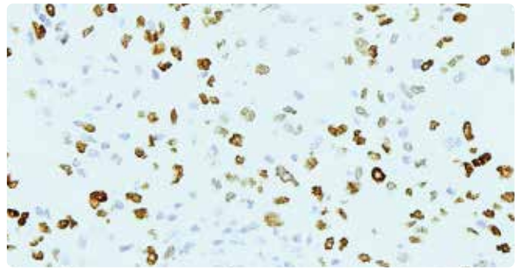


Oligo-2

IVD

- HIER
- Clone 211F1.1
- Nucleus
- Cat.No. GT2213

Oligo - 2 (Oligodendrocyte lineage transcription factor 2, tu glial cell line less transcription factor 2) is a kind of alkaline spiral - ring - helix transcription factors, and less glial specific related. Oligo-2 expression has been reported to be associated with most glial tumors, such as oligodendroglioma and astrocytoma. Although more than half of glioblastomas were positive for Oligo-2 expression, the expression was very weak in terms of the percentage of positive cells and the intensity of positivity. However, it was not expressed in non-glial tumors including neuroepithelial tumors, ependymomas, subependymomas, medulloblastomas and non-neuroepithelial tumors including CNS lymphoma, meningioma, schwannoma, atypical teratoid/rhabdoid tumors and hemangioblastoma. Compared with the strong expression of glioma, in the tumor tissue (glial proliferation) Oligo - 2 in weak expression.

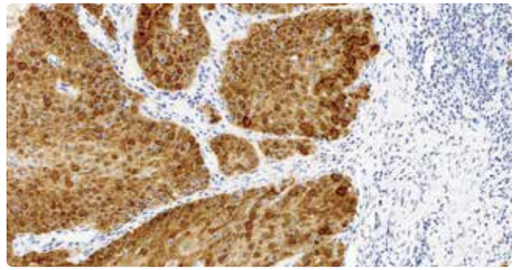


p16

IVD

- HIER
- Clone GM501
- Cytoplasm/nucleus
- Cat.No. GT2330

p16 is a tumor suppressor gene. Its mechanism of action is mainly to regulate cell cycle progression, by inhibiting cyclin-dependent kinase CDK4/6 and then inhibiting Rb to block G1 phase cells into S phase, inhibiting DNA synthesis and inhibiting cell proliferation. p16 can be mutated in malignant tumors, thus losing its inhibitory function and abnormally high expression. p16 can be used in the following aspects: 1. Diagnosis and differential diagnosis of squamous cell carcinoma (nuclear positive); 2. Diagnosis and differential diagnosis of high-grade squamous intraepithelial lesions (nuclear positive and diffuse epithelial positivity); And 3. Differential diagnosis between cervical and endometrial lesions (p16 positive in microglandular hyperplasia of cervix and negative in microglandular adenocarcinoma of endometrium).

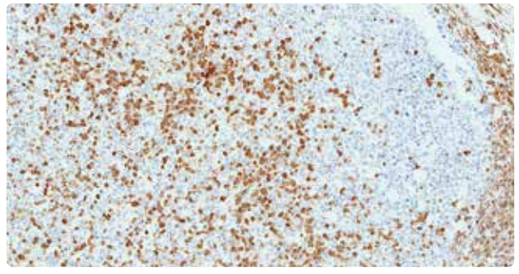


p27

IVD

- HIER
- Clone SX53G8
- Nucleus
- Cat.No. GM7203

P27 (P27 kip1) is a cyclin-dependent kinase inhibitor (CDKI). It can block the progression of cell cycle from G1 phase to S phase by binding to or inhibiting Cyclin or cyclin-dependent kinase (CDK). P27 and P21 are similar in structure and function. The expression level of P27 plays an important role in the prognosis of malignant tumors such as breast cancer.



p21/WAF1

IVD

- HIER
- Clone DCS-60.2
- Nucleus
- Cat.No. GT2043

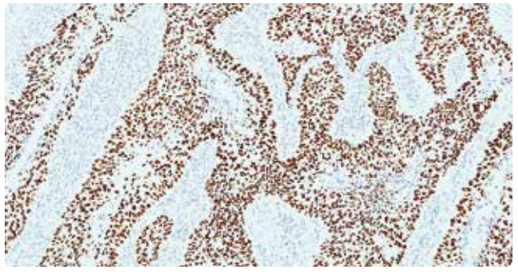
p21/WAF1, also known as CDKN1A, is a cell cycle inhibitor encoded by the CDKN1A gene located on chromosome 6 (6p21.2). Its expression is induced by wild-type p53 and is involved in cell cycle regulation. p21WAF1 binds to Cyclin-CDK complex and inhibits CDK activity, leading to cell cycle arrest. It is also a tumor suppressor and is used in the study of a variety of malignant tumors.

p40

IVD

- HIER
- Clone GM008/GR006
- Nucleus
- Cat.No. GT2531/GT2338

p40 (△Np63) is one of the subtypes of p63 protein. p63 is widely used in the classification of lung cancer in daily pathological diagnosis. It has a high sensitivity in lung squamous cell carcinoma, but it is also partially expressed in lung squamous cell carcinoma. Therefore, p40 is recommended for the differential diagnosis of lung squamous cell carcinoma and lung adenocarcinoma.

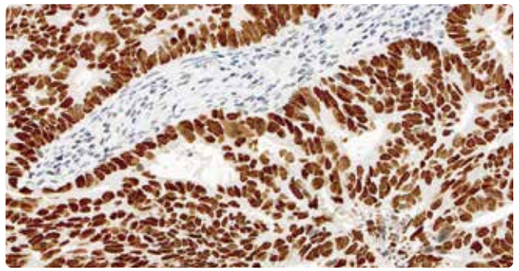


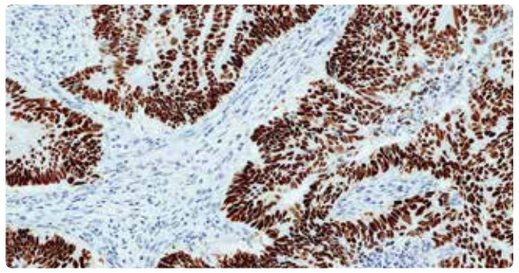
p53

IVD

- HIER/LIER
- Clone DO-7/BP-53-12
- Nucleus
- Cat.No. GM7001/GT2095

p53 is a tumor suppressor gene, which can be divided into wild type and mutant type. The mutation or deletion of p53 gene is the cause of many tumors.



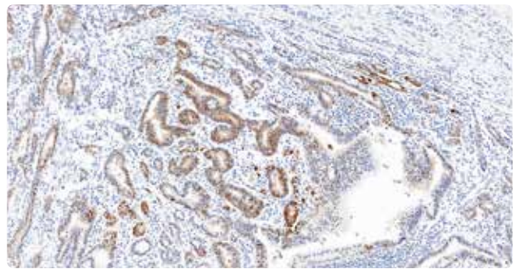


p62

IVD

- HIER
- Clone EPR18351
- Cytoplasm/nucleus
- Cat.No. GT2557

Sequestosome 1 (p62/SQSTM1) is a ubiquitin-binding protein involved in cell signal transduction, oxidative stress and autophagy. The protein polymer formed by p62/SQSTM1 can be specifically bound to the autophagosome membrane, and then the protein polymer containing p62/SQSTM1 is transported to the autophagosome and transported to the lysosome, which degrades the autophagosome. Therefore, detecting the changes of p62/SQSTMQ plays an important role in the study of autophagy and the mechanism of autophagy-related diseases. The impaired autophagy pathway can lead to the accumulation of p62, thereby promoting the growth of tumor cells. For example, 60% of lung adenocarcinoma and 90% of lung squamous cell carcinoma will have an increased level of p62, and there is also a significant high expression in prostate cancer, rectal cancer, breast cancer and primary liver cancer. In addition, p62 is also a common cytosolic inclusion component in protein aggregation diseases, such as neurofibrillary tangles in Alzheimer's disease, Lewy bodies in Parkinson's disease, Mallory bodies in steatohepatitis stem cells, and so on.

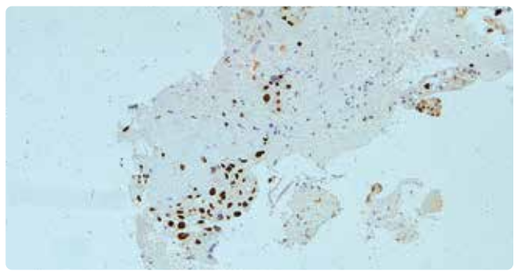


p57

IVD

- HIER
- Clone KP10
- Nucleus
- Cat.No. GT2069

P57 (P57kip2) is a tumor suppressor gene that is localized on chromosome 11p15. The protein encoded by p57kip2 is a cyclin-dependent kinase inhibitor (CDKI), which negatively regulates cell cycle. In normal placentas, more than 30% trophoblastic cells expressed CDKI. The antibody is mainly used to distinguish the complete hydatidiform mole (-) from the vesicular mole (+).

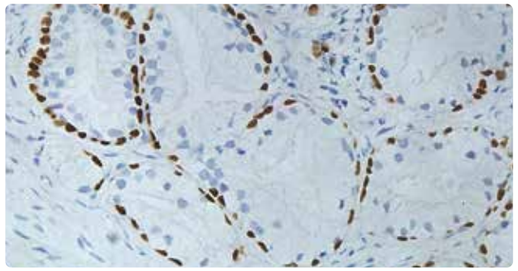


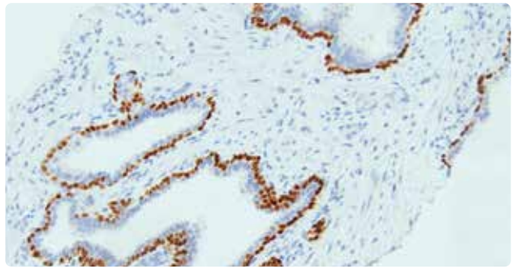
p63

IVD

- HIER
- Clone A4A/GM009/GR004
- Nucleus
- Cat.No. GM7247/GT2532/GT2331

P63, a homolog of the tumor suppressor P53 gene, is found in basal cells of the prostate but not in malignant prostate tumors. Therefore, P63 is an effective marker for the differentiation of benign and malignant prostate tumors. P63 can be used in combination with other antibodies such as HMW CK, PSA, PSAP, etc.



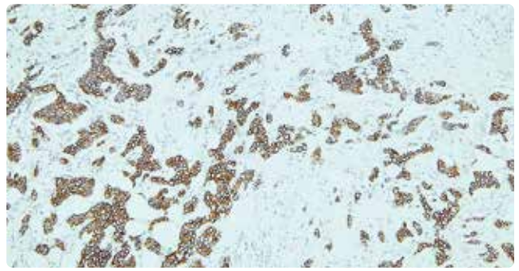


p120

IVD

- HIER
- Clone EP66
- Membrane/cytoplasm
- Cat.No. GT2099

P120 connexin is a tyrosine kinase related to E-cadherin, which can form functional complexes with E-cadherin on the surface of cell membrane. Both of them are important components of Wnt signaling pathway and play an important role in regulating cell growth and differentiation. It is often used in combination with E-cadherin and 34βE12 to distinguish invasive ductal carcinoma from lobular carcinoma of the breast. The expression of P120 was positive in the cell membrane of ductal carcinoma, but positive in the cytoplasm of lobular carcinoma.

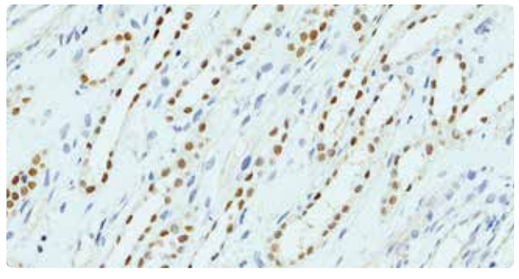


Pax-2

IVD

- HIER
- Clone GR007
- Nucleus
- Cat.No. GT2365

Pax-2 (Paired box gene 2), a member of the PAX family of transcription factors, is essential for the occurrence and development of organs such as the urogenital tract, mammary gland, central nervous system, eye and ear. In non-tumor tissues, Pax-2 is expressed in glomerular wall epithelial cells, distal convoluted tubules, renal collecting ducts, ovarian surface epithelial cells, fallopian tubes, and endometrium. The expression of Pax-2 in renal, ovarian and uterine tumors is helpful in the diagnosis of renal epithelial cell tumor and some gynecological tumors.

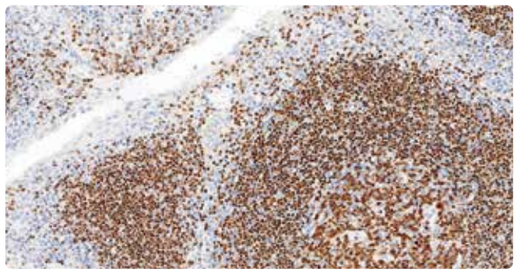


Pax-5

IVD

- LIER
- Clone GR001
- Nucleus
- Cat.No. GT2096

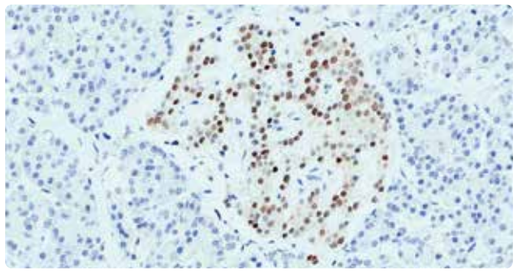
Pax-5 (Paired box gene 5) is a member of Pax nuclear transcription factor family. Pax-5 is expressed from precursor to mature B cells during normal lymphocyte differentiation, but weakly or not expressed in plasma cells at the end of differentiation. It is also expressed in the central nervous system of human embryos, and can also be expressed in the rete testis and epididymis. It is expressed in most B-cell lymphomas, but weakly expressed or negative in plasmacytoma. It is often used in the diagnosis of B lymphoblastic lymphoma, mature B cell lymphoma, Hodgkin's lymphoma, etc., and is sometimes more effective than CD20 on sections with poor tissue processing or cell degeneration. It is also expressed in the central nervous system of human embryos, and can also be expressed in the rete testis and epididymis. It is expressed in most B-cell lymphomas, but weakly expressed or negative in plasmacytoma. It is often used in the diagnosis of B lymphoblastic lymphoma, mature B cell lymphoma, Hodgkin's lymphoma, etc., and is sometimes more effective than CD20 on sections with poor tissue processing or cell degeneration.



PAX-6

- HIER
- Clone EP341
- Nucleus
- Cat.No. GT2278

PAX-6 (Paired box gene 6) is a transcription factor that belongs to the paired box gene family and is expressed in the sensory organs (including eye, nose, and olfactory tissues), central nervous system, and endocrine system during development. In adult life, PAX-6 expression is only expressed in the neuroendocrine system. Studies have shown that PAX-6 is expressed in the majority of neuroendocrine tumors arising from the pancreas, duodenum and colon. Thus, PAX-6 marks neuroendocrine cells and the tumor cells from which they originate (neuroendocrine tumor).

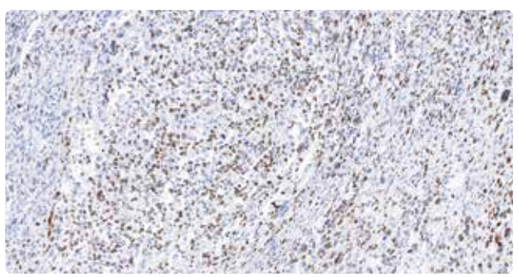


Pax-7

IVD

- HIER
- Clone PAX7/1187
- Nucleus
- Cat.No. GT2518

PAX7 belongs to the transcription factor paired box (PAX) family. As a transcription factor, PAX7 participates in the regulation of muscle stem cell proliferation and plays an important role in myogenesis and muscle regeneration. PAX7 expression is required for maintaining the normal function of satellite cells and can be used to identify satellite cells in muscle tissue. Chromosomal aberrations in the gene encoding PAX7 cause type 2 rhabdomyosarcoma (also known as alveolar rhabdomyosarcoma). PAX7 immunohistochemistry is helpful in the differential diagnosis of rhabdomyosarcoma from related soft tissue tumors.

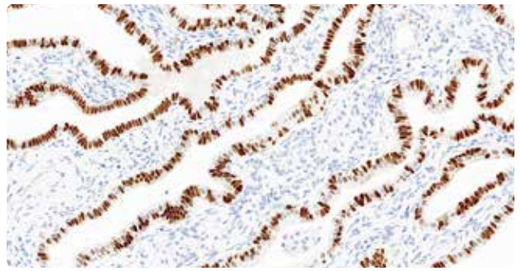


Pax-8

IVD

- HIER
- Clone GR002
- Nucleus
- Cat.No. GT2102

Pax-8 (Paired box gene 8), a member of the Pax nuclear transcription factor family, is involved in the development of thyroid follicular cells and the expression of thyroid-specific genes. "It is expressed in non-ciliated mucosal cells of the thyroid gland (and related carcinomas), fallopian tube, and ovarian cysts, but not in breast cancer and other non-gynecologic cancers other than the thyroid, making it a novel ovarian cancer marker and useful for the differential diagnosis of lung and neck tumors."

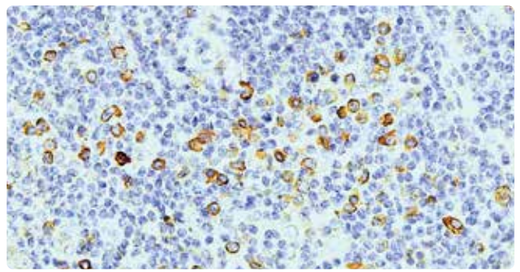


PC

IVD

- HIER
- Clone LIV3G11
- Cytoplasm
- Cat.No. GT2132

PC (Plasma Cell) is the terminal cell of B lymphocyte differentiation, which lacks HLA-I and II antigens, immunoglobulin, Fc and C3 receptors on the cell surface. This antibody can mark normal and neoplastic plasma cells. It is mainly used in the differentiation of myeloma from plasmacytoma, and also in the differentiation of lymphoplasmacytoid lymphoma from follicular lymphoma.

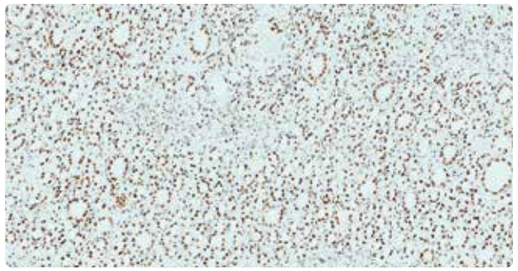


PBRM1

IVD

- HIER
- Clone GR017
- Nucleus
- Cat.No. GT2539

PBRM1, also known as BAF180, is a subunit of the SWI/SNF chromatin complex. The SWI/SNF chromatin complex is a master regulator of gene expression. The energy released from ATP hydrolysis by ATP-catalytic enzyme subunits interferes with histone contact with DNA and drives nucleosome movement to regulate chromatin structure. Loss of PBRM1 protein may be a biomarker of clear cell renal cell carcinoma (ccRCC).

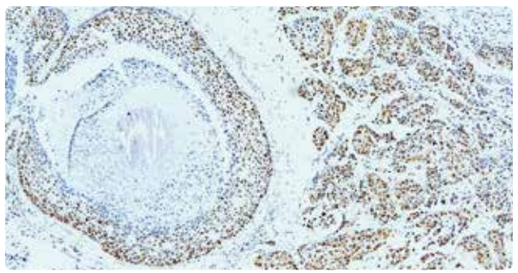


PCNA

IVD

- HIER
- Clone PC10
- Nucleus
- Cat.No. GM0879

Proliferating cell nuclear antigen (PCNA) is a nuclear protein associated with cell cycle, which is essential for cellular DNA synthesis. The expression of PCNA was not observed in G0 phase, increased gradually in G1 phase, reached the peak in S phase, and decreased significantly in G2-M phase. The change of PCNA expression was consistent with DNA synthesis. It can be used as a marker to evaluate cell proliferation index, to study the proliferation state of tumor cells, and to judge the treatment and prognosis of tumor.

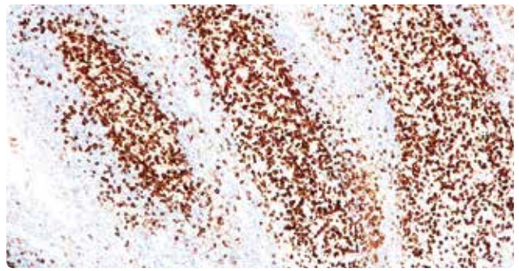


PD-1

IVD

- HIER
- Clone 2E5
- Cytoplasm
- Cat.No. GT2281

Programmed cell death protein 1 (PD-1) is a type I transmembrane immunoglobulin receptor, a member of the CD28-mediated immune response superfamily. Expressed on activated T cells, B cells and bone marrow cells, PD1 inhibits the proliferation of T cells and the production of related factors, such as IL-1,IL-4,IL-10 and IFN-γ, by inhibiting the activation of the PI3K/AKT signaling pathway. In addition, PD1 plays an important role in peripheral immune tolerance mechanisms and autoimmune diseases.

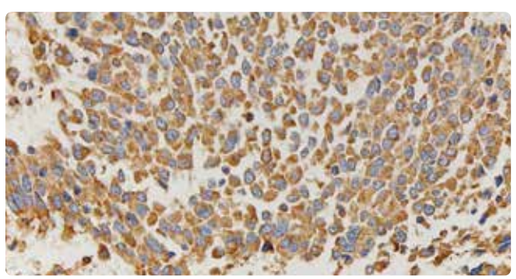


PDGFRα

IVD

- HIER
- Clone poly
- Membrane/cytoplasm
- Cat.No. GT2391

Platelet-derived growth factor receptorα (PDGFRα) is a kind of receptor tyrosine kinase, which plays an important role in the regulation of embryonic development, cell proliferation, cell survival and chemotaxis. PDGFRα is generally expressed in normal neurons and Schwann cells, but not in normal cells of Cajal, but expressed in gastrointestinal stromal tumors with PDGFRα mutation. PDGFRα mutation can be detected in CD117-negative gastrointestinal stromal tumors, which are often accompanied by a high degree of tumor aggressiveness. Pdgfrα mutation can be used as a supplement to screen imatinib sensitive tumor markers.



PD-L2

IVD

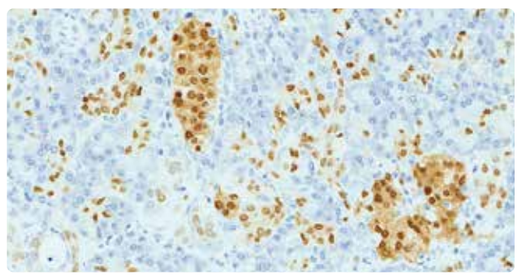
- HIER
- Clone GM310
- Cytoplasm
- Cat.No. GT2429

Programmed cell death ligand 2 (PD-L2) is a member of the B7 family of ligands, which can be expressed in immune cells, stromal cells and tumor cells. The expression of PD-L2 can be found in a variety of tumor types even in the absence of PD-L1 expression. Pd-l2 is closely related to the grade, stage and prognosis of tumors, and may become a target for targeted therapy.

PDX1

- HIER
- Clone EP139
- Nucleus
- Cat.No. GT2293

PDX1 (Pancreaticandduodenalhomeobox1) is also called insulin start factor 1, is essential for pancreas development and beta cells mature transcription factors. Mutations in the PDX-1 gene have been shown to cause pancreatic dysplasia, maturity-onset diabetes of the young, and type II diabetes. PDX1 is initially expressed in the intestinal region of the embryo and is selectively expressed in adult endocrine glands, such as pancreatic β-cells, Brunner's glands of the duodenum, and pylorus endocrine cells of the stomach. In the pancreas, PDX1 can be detected in immature exocrine cells and ductal cells. Increased PDX1 expression has been reported in pancreatic, colonic, and prostate tumors, suggesting that PDX1 may serve as a useful biomarker for these malignancies.

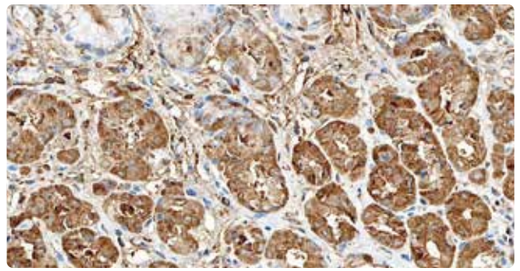


Pepsinogen I

IVD

- HIER
- Clone 7G3
- Cytoplasm
- Cat.No. GT2463

Pepsinogen I (Pepsinogen I) is mainly secreted by the chief cells and mucus neck cells of the fundic gland. When the gastric mucosa is atrophic, the number of chief cells is reduced, and pepsinogen I secretion is reduced. Therefore, Pepsinogen I can reflect the secretory function and pathological state of gastric mucosa to a certain extent, and has important clinical significance in the diagnosis of gastric cancer and chronic atrophic gastritis.

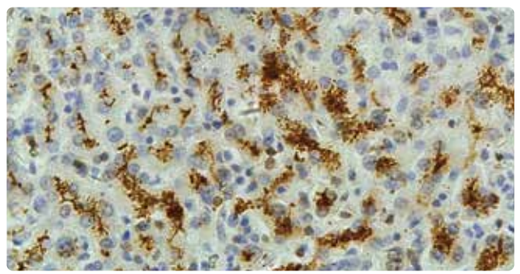


Pgp

IVD

- HIER
- Clone EP271
- Membrane
- Cat.No. GT2223

P-Glycoprotein (P-glycoprotein) is a cell membrane protein that is associated with the tolerance of a variety of lipophilic chemotherapeutic agents. This protein is found in epithelial transport in a variety of normal tissues, including liver, kidney, colon, adrenal gland, and brain. The drug resistance of P-glycoprotein is mainly vinorelbine and adriamycin, which is of great clinical significance for the choice of chemotherapy regimen and the judgment of prognosis in cancer patients.



Perforin

IVD

- HIER
- Clone 5B 10
- Cytoplasm
- Cat.No. GT2007

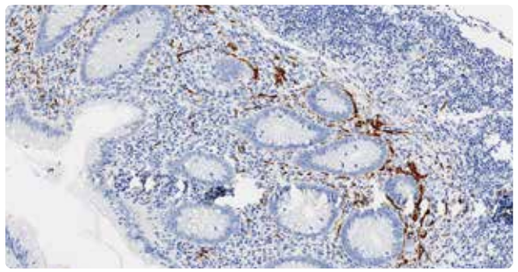
Perforin is a pore-forming protein in the cytoplasm of cytotoxic T lymphocytes. It is strongly expressed in CD3 (-), CD56 (+) NK cells and CD3 (+) large granular cells, but not expressed or weakly expressed in CD8 (+) T cells. This antibody is mainly used in the diagnosis and research of NK-cell lymphoma.

PGP9.5

IVD

- HIER
- Clone GR512
- Cytoplasm/nucleus
- Cat.No. GZ5116

PGP9.5 is a whole-nerve marker that is widely distributed in neurons and nerve fibers in the central and peripheral nervous systems. This antibody is often used in combination with Syn, CgA, NSE and CD56, and is mainly used in the diagnosis of neuroendocrine tumors. In addition, PGP9.5 can also specifically label the inclusion bodies present in some neurodegenerative diseases.

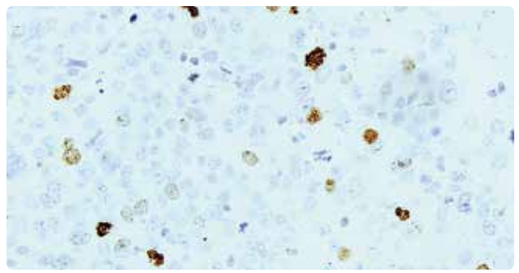


PHH3

IVD

- HIER
- Clone zr285
- Nucleus
- Cat.No. GT2193

PHH3 (Phosphohistone H3) is a specific marker for cell mitosis. Phh3 is positive in the nuclear division phase of early, metaphase, anaphase and telophase of mitosis, and can be used for nuclear division count. It can be used in the research of central nervous system tumors, melanoma, soft tissue tumors, breast cancer and other tumors.

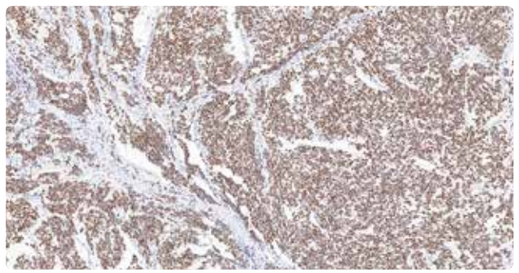


PHOX2B

IVD

- HIER
- Clone EPR14423
- Nucleus
- Cat.No. GT2455

PHOX2B (Paired likeHhomebox 2B) plays an important role in promoting the differentiation of autonomic neurons. PHOX2B is highly expressed in both differentiated and undifferentiated neuroblastoma, so it can be used as a marker for the diagnosis of neuroblastoma. Studies have found that this gene mutation is also associated with Hirschsprung's disease.

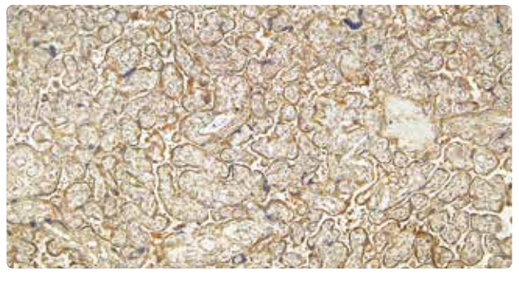


PI3K P85

IVD

- HIER
- Clone SP62
- Cytoplasm
- Cat.No. GT2214

PI3K (phosphatidylinositol-3-kinase) is a specific kinase that catalyses phosphatidylinositol-3-kinase, consisting of a p85 regulatory subunit and a p110 catalytic subunit. Its activation can regulate cell proliferation, differentiation, survival and migration. PI3K pathway is another signaling pathway closely related to tumorigenesis besides Ras pathway.

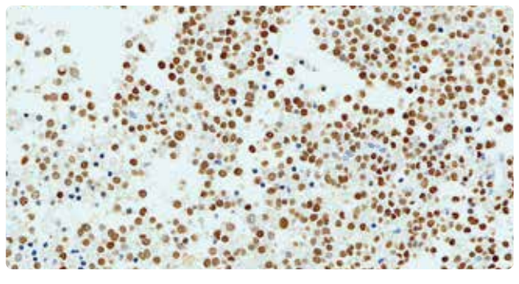


PIT-1

IVD

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2319

Pituitary specific transcription factor-1 (PIT-1) is an important transcription factor specifically expressed in the anterior pituitary, which has a highly conserved DNA binding domain. PIT-1 positively regulates the transcription of growth hormone (GH), prolactin (PRL) and thyrotropin (TSH) genes, and can activate the expression of other genes essential for the survival and proliferation of these three cells. PIT-1 is characteristically expressed in the differentiation of the eosinophilic lineage in pituitary tumors.

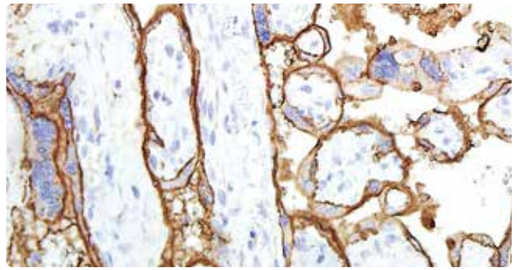


PLAP

IVD

- HIER
- Clone GR318
- Cytoplasm
- Cat.No. GM7191

"Placental alkaline phosphatase (PLAP), a membrane-bound metal alkaline phosphatase, is found in normal placentas and is a marker of germ cell tumors, but is negative in spermatocytic seminoma and immature teratoma." Complete or partial PLAP- in vesicular fetal masses, as compared with PLAP+ in choriocarcinoma, can be used for differential diagnosis. PLAP expression can also be observed in non-reproductive system tumors such as gastrointestinal cancer, lung cancer and endometrial cancer. Some rhabdomyosarcomas, leiomyosarcomas, GIST, desmoplastic small round cell tumors, fibroblastomas and synovial sarcomas show cytoplasmic PLAP expression.

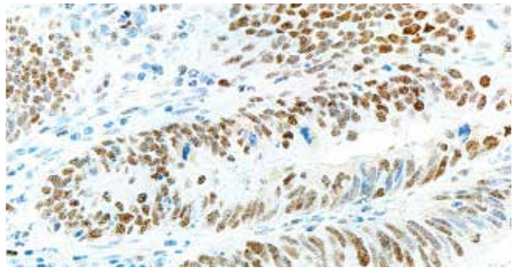


PMS2

IVD

- HIER
- Clone EP51
- Nucleus
- Cat.No. GT2159

PMS1 Homolog 2 (PMS1 Homolog 2) is an important gene in the human mismatch repair gene family. Human mismatch repair genes play an important role in maintaining the integrity and stability of genetic information and avoiding genetic mutations. The deletion of PMS1 gene after mutation will make the cell mismatch repair function defect, lead to microsatellite instability (MSI), and make the human tumor susceptible. At present, it is used together with MLH1, MSH2, and MSH6 for Lynch syndrome screening, prognosis prediction of colorectal cancer, treatment guidance for stage II colorectal cancer, and population screening for colorectal cancer immunotherapy.

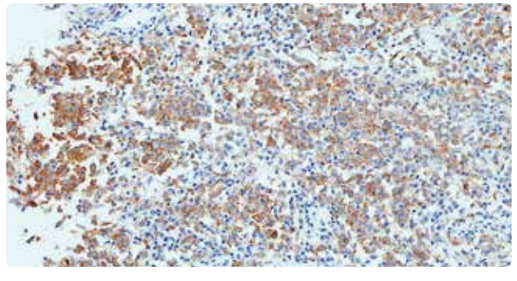


PNL2

IVD

- HIER
- Clone PNL2
- Cytoplasm
- Cat.No. GT2336

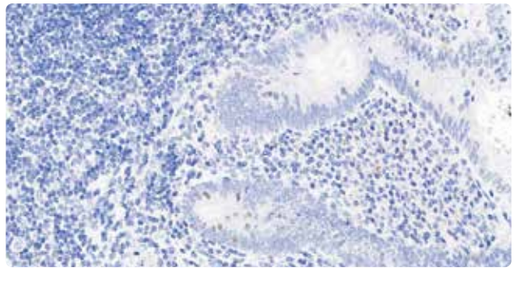
PNL2 is a new monoclonal antibody against melanocyte antigen. It shows cytoplasmic staining in normal melanocytes and tumors from which it originates, and its detection rate is higher than that of previous markers. The positive rate of PNL2 in clear cell tumor, angiomyolipoma and lymphangioleiomyoma was different. Perivascular epithelioid cell tumors and melanotic schwannoma showed positive staining for non-melanocytic lesions. In combination with HMB45, MART-1, Tyrosinase and MiTF antibodies for the diagnosis of melanoma and clear cell sarcoma.



POU2F3

- HIER
- Clone 6D1
- Nucleus
- Cat.No. GT2580

POU2F3, also known as OCT-11, belongs to the OCT family of Octamer motif-binding transcription factors. It is a major transcriptional regulator in chemosensitive and immunomodulatory plexus cells and is responsible for driving the differentiation of specialized chemosensitive cells in the gastrointestinal tract and respiratory tract. POU2F3 is a novel biomarker for chemosensitive plexus cell-associated small cell lung cancer (SCLC-P), a prominent feature of which is the low expression or absence of neuroendocrine (NE) phenotypic markers.

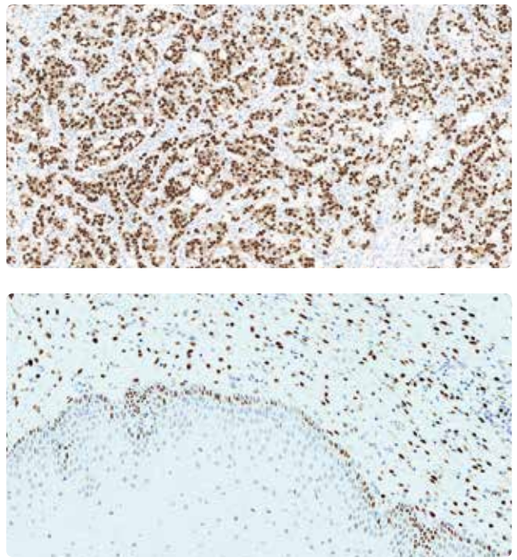


PR

IVD

- HIER
- Clone SP2
- Nucleus
- Cat.No. GT2057

Progesterone Receptor (PR) marks the cells with high levels of progesterone receptor, such as normal and benign and malignant breast epithelial cells, endometrial glandular epithelial cells, uterine smooth muscle cells, etc. It is one of the necessary tests for patients with breast cancer, as well as ER antibody. It is an important indicator of prognosis and endocrine therapy of breast cancer.

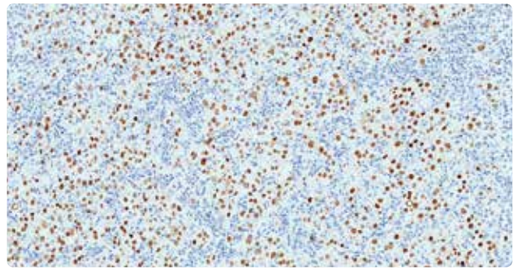


Prame

IVD

- HIER
- Clone EPR20330
- Nucleus
- Cat.No. GT2466

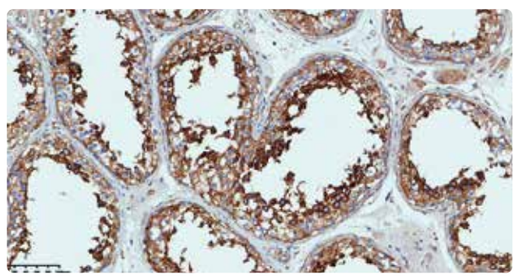
Prame, a member of cancer testis Antigen (cTA) family, was first isolated from melanoma cells by Ikeda. It can be presented by HLA-A24 molecule to cytotoxic Tlymphocytes (CTL). The expression of PRAME in normal tissues is limited to the testis, ovary and adrenal gland. The limited expression of PRAME in normal tissues and its high expression in tumor tissues are considered as ideal targets for tumor immunotherapy.



PRKAR1A

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2582

PRKAR1A, the full name of camp-dependent protein kinase regulatory subunit 1α, is expressed in various tissues of the human body and has A high affinity with cAMP. It is the most important regulatory subunit of protein kinase A (PKA). PRKAR1A gene mutation is closely related to the occurrence of Carney syndrome, cardiac myxoma, schwannoma, bone tumors, leukemia, thyroid cancer and other endocrine tumors.

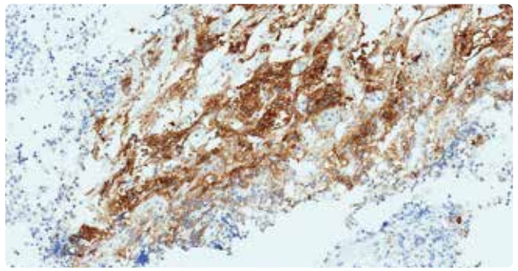


PRL

IVD

- HIER
- Clone SPM108
- Cytoplasm
- Cat.No. GT2161

Prolactin (Prolactin) is a hormone secreted by eosinophils in the anterior pituitary gland that promotes mammary gland development and milk production. This antibody is mainly used to label pituitary prolactin cells and their tumors, which is helpful for the study of functional classification of pituitary tumors.

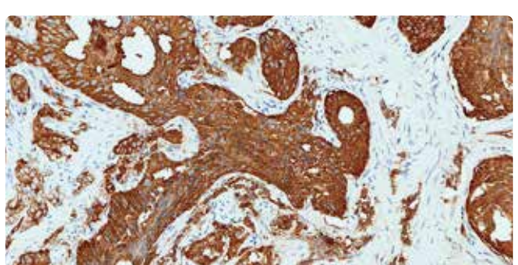


PSA

IVD

- HIER
- Clone GM107
- Cytoplasm
- Cat.No. GT2179

Prostate specific antigen (PSA) is a kind of glycoprotein synthesized by prostate epithelial cells. It is expressed in normal prostatic acinar cells, ductal epithelial cells and luminal secretions, and also in benign prostatic hypertrophy, hyperplasia and tumors. This antibody can be used as a basis for the diagnosis of prostate cancer and metastatic prostate cancer, and can also be used for the differential diagnosis of prostate cancer and metastatic adenocarcinoma. It is expressed in acinar and ductal epithelial cells of the prostate. Bladder, urethra, periurethral glands and urachal residues; Seminal vesicles (with polyclonal antibodies); Endometrium; Anal mucosa and glands; Pancreatic duct cells; Normal salivary glands; Neuroglia; Prostate cancer (high-grade tumors may be negative) adenocarcinoma of the urethra and periurethral glands; Paget's disease of the extramammary penis; Pleomorphic adenoma and carcinoma of salivary glands; Some endocrine tumors; The monoclonal antibody showed better specificity, while the polyclonal antibody showed better sensitivity. Identification of metastatic prostate cancer: combination of PAP, CK7, CK20 and CK57.

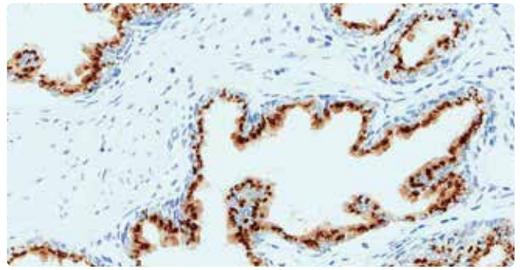


Prostein

IVD

- HIER
- Clone ZR9
- Cytoplasm
- Cat.No. GT2274

P501S (also known as Prostein) is a 553 amino acid protein screened from a cDNA library of prostate cancer tissue and verified by microarray. It has been found that p501S is specifically expressed in normal or cancerous prostate tissues. The expression of P501S can be detected in most normal and malignant prostate tissues (regardless of differentiation grade or metastasis) by immunohistochemistry, but not in other tissues or tumors. It is worth mentioning that p501S is also expressed in most poorly differentiated prostate cancers such as small cell carcinoma of the prostate. In conclusion, p501S is a more sensitive and specific prostate cancer marker than PSA and PSAP.

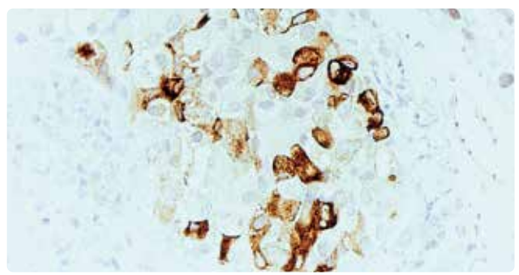


pS2

IVD

- HIER
- Clone pS2.1
- Cytoplasm
- Cat.No. GT2023

pS2, also known as PNR-2, is a cytosolic polypeptide regulated by estrogen with a molecular weight of 6.5kDa. pS2 was expressed in normal gastric mucosa, small intestinal mucosa and breast epithelium. pS2 is mainly expressed in breast cancer and gastric cancer. The expression of PS2 in breast cancer is related to the expression of ER, and it is more common in ER and PR positive breast cancer. It can be used to study the response of breast cancer patients to endocrine therapy.

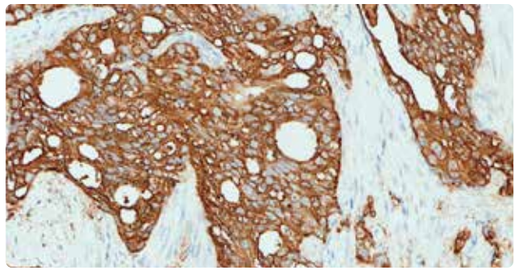


PSAP

IVD

- HIER
- Clone PASE/4LJ
- Cytoplasm
- Cat.No. GT2039

PSAP (Prostate specific acid phosphatase) is a glycoprotein synthesized by prostate epithelial cells and has the function of hydrolyze phosphate esters. Psap is expressed in normal prostatic acinar cells, ductal epithelial cells and luminal secretions, and also in benign prostatic hypertrophy, hyperplasia and tumors. It is similar to PSA, but less specific. It is mainly used in the diagnosis of prostate cancer and metastatic prostate cancer. In addition, positive expression was also observed in urethra, periurethral glands, pleomorphic adenoma, neuroendocrine tumor, breast cancer, colon cancer and gastric cancer tissues.

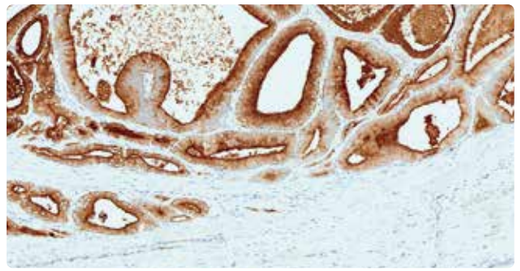


PSMA

IVD

- HIER
- Clone GM510
- Membrane/cytoplasm
- Cat.No. GT2051

Prostate specific membrane antigen (PSMA) is a type II transmembrane glycoprotein with a molecular weight of 100kDa, which has folate hydrolase and neuropeptidase activities. Its coding gene is located on the short arm of chromosome 11. PSMA is mainly expressed in normal and malignant prostatic epithelial cells and a small amount of non-prostatic tissues. In prostate cancer, PSMA has been shown to be closely related to the progression of the disease, and is highly expressed in hormone-resistant and metastatic disease.

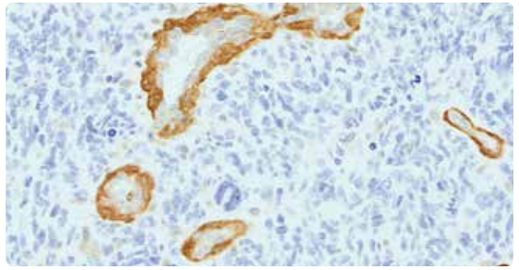


PTEN

IVD

- HIER
- Clone RM265
- Cytoplasm/nucleus
- Cat.No. GT2010

PTEN (Phosphatase and tensin homolog), also known as MMAC1 or TEP1, is a tumor suppressor gene located on human chromosome 10q23. The phosphatase encoded by this gene can regulate cell cycle and apoptosis. It has been found that there are deletions and mutations of PTEN in a variety of human tumors and hereditary cancer susceptibility syndrome diseases. The expression of PTEN in glioma, breast cancer and prostate cancer is correlated with the prognosis of patients.

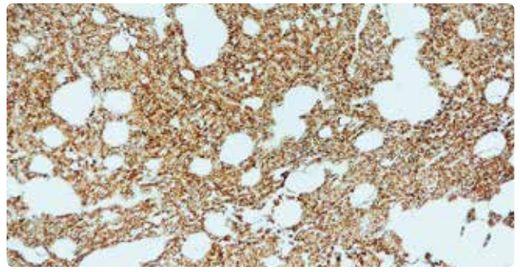


PTH

IVD

- HIER
- Clone MRQ-31
- Membrane/cytoplasm
- Cat.No. GT2288

Parathyroid hormone (PTH) is a basic single-chain polypeptide hormone secreted by chief cells of parathyroid glands. Parathyroid hormone can regulate calcium metabolism by increasing blood calcium level, and has the function of promoting the growth and development of human bones. This antibody is mainly used in the diagnosis and research of parathyroid tumors.

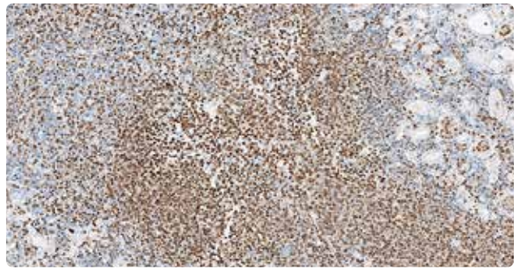


PU.1

IVD

- HIER
- Clone GR019
- Nucleus
- Cat.No. GT2495

As a transcription factor, PU.1 belongs to the Ets protein family and plays an important role in the development of normal B cells. It is expressed in bone marrow cell lines and B cells, but not in plasma cells. PU.1 is essential for the early differentiation of B cells, and deficiency of PU.1 will arrest B cell development in the early prophase. PU.1 is expressed in germinal center and mantle B cells, as well as in various lymphomas, including chronic B-cell lymphocytic leukemia, mantle cell lymphoma, follicular lymphoma, marginal zone lymphoma, diffuse large cell lymphoma, diffuse large B-cell lymphoma, and nodular lymphocyte-predominant Hodgkin lymphoma. Torlakovic et al. showed that high expression of germinal center antigens, including PU.1, was associated with a quantifiable positive association with overall and progressive survival in follicular lymphoma.

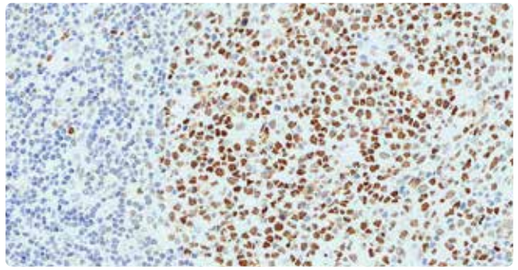


Rb

IVD

- HIER
- Clone 13A10
- Cytoplasm
- Cat.No. GT2342

Retinoblastoma gene protein (Rb) is a tumor suppressor gene. Rb protein is a phosphoprotein located in the nucleus. Phosphorylation and dephosphorylation of Rb protein are the main forms of Rb protein regulating cell proliferation and differentiation. The dephosphorylated Rb protein binds to the transcription factor E2F, leaving E2F in an inactive state and inhibiting the cell transition from G1 to S phase. The abnormal expression of Rb protein is closely related to the occurrence of some tumors, such as retinoblastoma, breast cancer, esophageal cancer, prostate cancer, small cell lung cancer and so on.

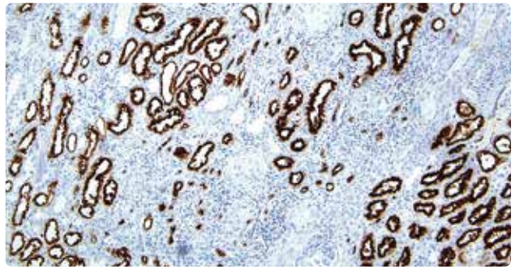


RCC

IVD

- Enzyme
- Clone 66.4.C2
- Membrane/cytoplasm
- Cat.No. GT2109

RCC (Renal cell carcinoma marker) is a glycoprotein. It is distributed in the luminal surface of the proximal convoluted tubules and Bowman's capsule of the normal kidney, as well as in the lobule of the normal breast, the luminal surface of the ducts, the luminal surface of the epididymal tubules, and in the chief cells of the thyroid gland and in the glia of the thyroid follicles. The antigen has been reported to be expressed in 93% of primary renal carcinomas and 84% of metastatic renal carcinomas. Parathyroid adenomas are positive, and about 30% of breast tumors and embryonal carcinomas are positive. It can be used in combination with antibodies such as Vimentin and CD10 for the diagnosis of renal cell carcinoma.

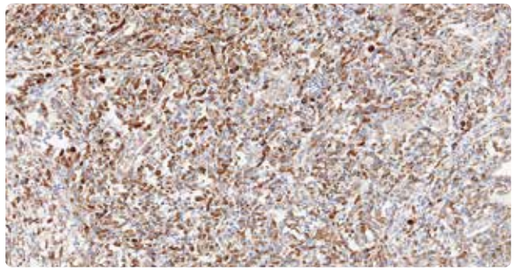


ROS1

IVD

- HIER
- Clone EPMGHR2
- Cytoplasm
- Cat.No. GT2546

ROS1, also known as C-ros proto-oncogene 1, receptor tyrosine kinase, is a viral proto-oncogene with a unique oncogenic role. It is located on chromosome 6q21. Ros1 is a member of the insulin receptor family of tyrosine kinases. ROS1 activates signaling pathways involved in cell differentiation, proliferation, growth, and survival. The protein encoded by this gene is a type I integral membrane protein with tyrosine kinase activity that can function as a receptor for growth or differentiation factors. It can be used to identify ROS1 gene rearrangement in lung cancer, gastric cancer, glioblastoma, cholangiocarcinoma and ovarian cancer. ROS1 gene rearrangement occurs mostly in young, non-smokers or light smokers with lung adenocarcinoma. The incidence of ROS1 gene rearrangement in patients with non-small cell lung cancer (NSCLC) is 1-2%. It can be treated with ALK inhibitor crizotinib and is mainly used in the treatment of non-small cell lung cancer.

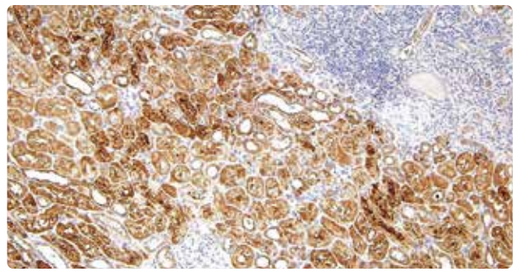


RRM1

IVD

- HIER
- Clone EPR8482
- Cytoplasm
- Cat.No. GT2217

Ribonucleotide reductase catalytic subunit M1 (RRM1) is one of two different subunits that make up nucleoside diphosphate reductase. During the S phase of the cell cycle, nucleoside diphosphate reductase catalyzes the production of deoxynucleotides prior to DNA synthesis. Numerous studies have shown that RRM1 controls cell proliferation through deoxynucleotide production and cancer cell metastasis through PTEN induction. The expression of RRM1 is highly correlated with the expression of ERCC and PTEN in NSCLC. Rrm1-positive tumors predict slow progression.

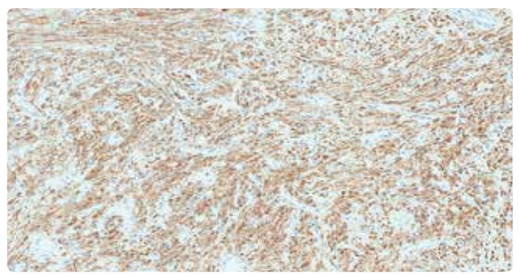


2SC

IVD

- HIER
- Clone poly
- Cytoplasm/nucleus
- Cat.No. GT2544

2SC(2-succinocysteine, 2-succinic acid cysteine) is the product of loss of function of FH (fumarate hydratase) : defects in the FH gene cause TCA cycle arrest and/or respiratory chain dysfunction, leading to accumulation of oxygen free radicals and oxidative stress. As an endogenous electrophilic reagent, fumaric acid reacts with free sulfhydryl groups and forms thioether bonds with cysteine residues in a variety of proteins through Michael addition reaction, eventually forming 2SC. The combined detection of 2SC and FH is helpful for the diagnosis of Hereditary leiomyomatosis and renal cell carcinoma (HLRCC). In addition, the combined detection of FH-/2SC+ can also be used for the diagnosis of paraganglioma, pheochromocytoma, Leytid-cell tumor of testis, ovarian cystadenoma and other diseases.

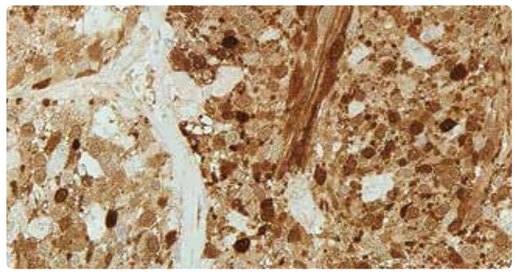


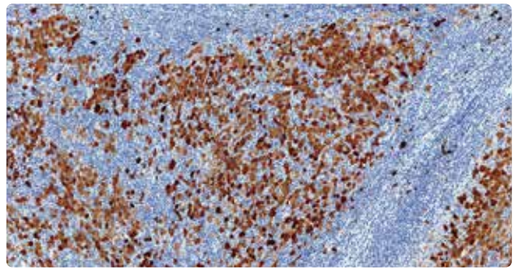
S100

IVD

- HIER
- Clone 4C4.9/GR511
- Cytoplasm/nucleus
- Cat.No. GT2249/GZ0311

S-100 is a dimer composed of α and β chains. "S-100 is widely present in mesenchymal cells and lymphoid hematopoietic tissues, such as glial cells, melanoma cells, chondrocytes, Schwann cells, interphalangeal reticular cells, and Langerhans cells." It is valuable in the diagnosis of melanoma, and it is more expressed than HMB-45 in metastatic melanoma. To differentiate intrachondral tumors from other bone tumors; Differentiate sclerosing adenosis from tubular adenocarcinoma of the breast; To distinguish Paget's disease from epithelial spreading melanoma.



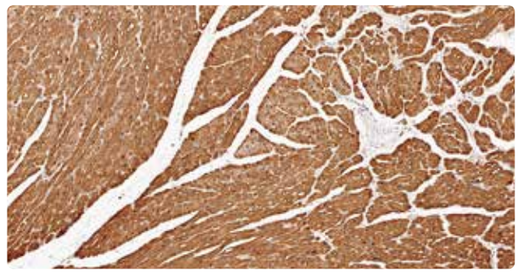


S100A1

IVD

- HIER
- Clone EPR19013
- Cytoplasm/nucleus
- Cat.No. GT2555

S100A1, a member of the S100 family, is a calcium-binding protein that is mainly expressed in the myocardium and regulates the intracellular Ca2+ environment, cell contraction, and energy metabolism. The expression of S100A1 is abnormal under pathological conditions, which is related to the occurrence and development of tumors such as renal cell carcinoma, breast cancer and thyroid cancer. In addition, studies have shown that S100A1 is up-regulated in endometrial carcinoma and endometrial atypical hyperplasia, which promotes the proliferation of endometrial cancer cells.

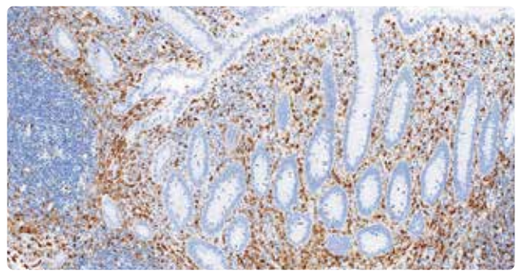


S-100 A4

IVD

- HIER
- Clone EPR14639(2)
- Membrane/Cytoplasm/nucleus
- Cat.No. GT2420

S-100 A4 protein is an important member of the S-100 family of calcium-binding proteins, which is expressed in tumor cells and normal cells. S-100 A4 protein is closely related to cell differentiation, tumor genesis, metastasis and prognosis. It is often used in tumor research.

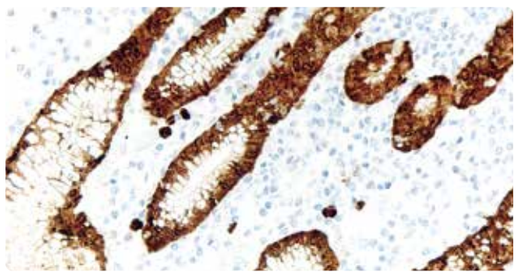


S100P

IVD

- HIER
- Clone GTM5
- Cytoplasm/nucleus
- Cat.No. GT2286

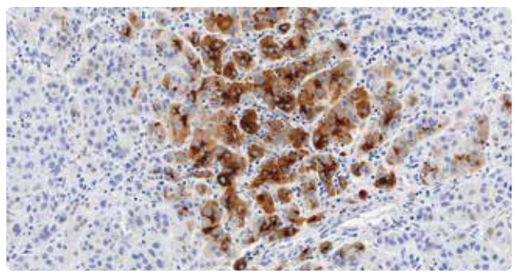
S100P belongs to the S-100 protein family, which contains two EF hand-shaped calcium-binding domains. S-100 can be expressed in a variety of cell types, and its expression is distributed in the cytoplasm and nucleus of cells. It is related to cell cycle and cell differentiation. S100P is expressed in a variety of normal tissues such as placenta, bladder, spleen and gastrointestinal mucosa. S100P is overexpressed in colon cancer, prostate cancer, pancreatic cancer, lung cancer and other tissues, which is related to tumor progression. In lung cancer, S100P can also be used as a predictor of poor distant metastasis and survival in non-small cell lung cancer. In addition, S100P is a marker of early pancreatic carcinogenesis and can be used as a marker of pancreatic ductal adenocarcinoma.



SAA

- HIER
- Clone EP11592-92
- Cytoplasm
- Cat.No. GT2473

Serum Amyloid A (SAA) is an acute phase reaction protein synthesized by the liver. Under normal circumstances, the content of SAA in plasma is very small. When the body is stimulated by inflammation and there is an acute inflammatory response, monocytes and macrophages will be activated and release A large number of inflammatory factors. It stimulates the synthesis of SAA by liver fibroblasts and macrophages. Therefore, SAA is a sensitive indicator of infection and inflammation recovery. In addition, the expression of SAA is up-regulated in a variety of malignant tumors such as pancreatic ductal carcinoma, gastric cancer, triple negative breast cancer, and is closely related to tumor invasion, metastasis and recurrence.

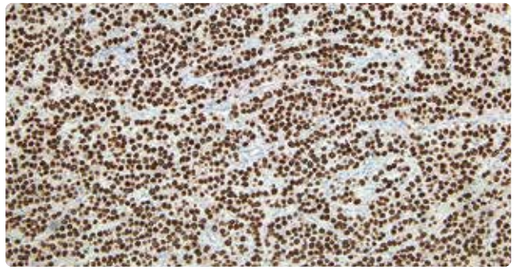


SALL4

IVD

- HIER
- Clone GM013
- Nucleus
- Cat.No. GT2283

SALL4 (Spalt like transcription factor 4) is a newly identified zinc-finger transcription factor, which maintains the pluripotency of embryonic stem cells by regulating OCT4. Abnormal expression of SALL4 usually indicates the possibility of primordial germ cell neoplastic lesions. In gynecological pathology, SALL4 is expressed in almost all primordial germ cell tumors and may be partially expressed in the primitive neuroepithelium of immature teratomas. Therefore, SALL4 can be used as a preliminary screening marker for gynecological germ cell tumors and non-germ cell tumors.

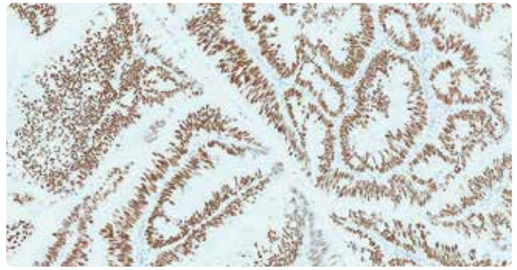


SATB2

IVD

- HIER
- Clone EP281
- Nucleus
- Cat.No. GT2294

Special AT-rich sequence-binding protein 2 (SATB2) is a nuclear matrix-associated protein, which promotes gene recombination and chromatin remodeling and regulates gene expression. Satb2 plays an important role in eukaryotic development, immune regulation, apoptosis regulation, tumor genesis and metastasis, and osteoblast differentiation. SATB2 is expressed in 90.4% of osteosarcomas and can be used for the diagnosis of osteosarcoma, as well as in the differential diagnosis of other types of bone tumors such as Ewing's sarcoma and chondrosarcoma. In addition, the sensitivity of SATB2 in colorectal cancer was 85%, and increased to 93% when SATB2 was co-expressed with CK20.

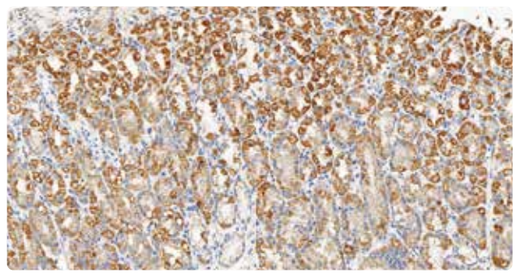


SDHA

IVD

- HIER
- Clone GR300
- Cytoplasm
- Cat.No. GT2436

Succinic dehydrogenase (SDH) is A complex of four protein subunits (A, B, C, and D) located in the inner mitochondrial membrane, which can convert succinic acid to fumarate in the tricarboxylic acid cycle. SDH is also a tumor suppressor gene related to tumorigenesis. Germline mutation of one SDH subunit can lead to tumorigenesis. SDHA deficiency is a cause of mitochondrial complex II deficiency (MT-C2D), and its mutation can lead to a mitochondrial respiratory chain deficiency called Leigh syndrome. Mutations in the SDH1 gene have also been implicated in the development of gastrointestinal stromal tumors and paragangliomas, as well as pheochromocytoma and kidney cancer.

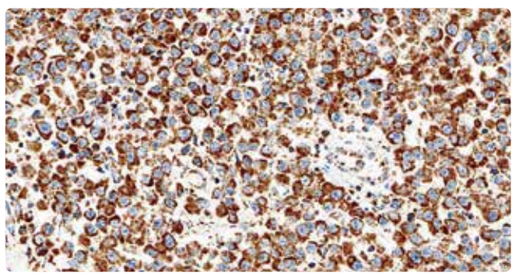


SDHB

IVD

- HIER
- Clone EP288
- Cytoplasm
- Cat.No. GT2347

SDHB (Succinate dehydrogenase B) is A complex of four protein subunits (A,B,C, and D) located in the inner mitochondrial membrane, which can convert succinate to fumarate in the tricarboxylic acid cycle. Mutation of any subunit will lead to instability and loss of complex function. SDHB is expressed in tissue cells such as renal tubules, salivary glands, placental trophoblasts, large and small brain neurons, etc. SDHB is mainly used to detect SDHB mutation in gastrointestinal stromal tumors (GIST), pheochromocytoma and some renal cell carcinomas.

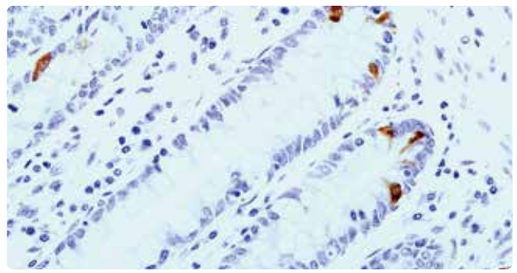


Serotonin

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2237

Serotonin (serotonin), commonly known as 5-hydroxytryptamine, is an indole derivative and an important neurotransmitter and paracrine signaling molecule involved in the regulation of gastrointestinal motility and secretory function, mainly distributed in the pineal gland and hypothalamus. It is expressed in chromaffin cells of the central nervous system and gastrointestinal tract, and is mainly used in neuroendocrine cells and tumor research.

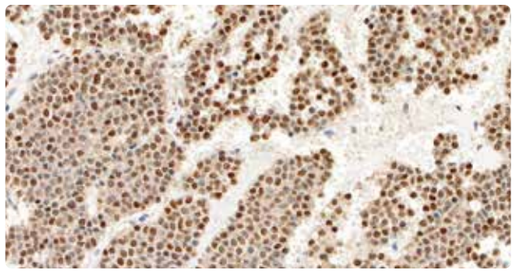


SF-1

IVD

- HIER
- Clone ZR350
- Nucleus
- Cat.No. GT2317

SF-1 (Steroidogenic factor-1, also known as NR5A1) is a member of the orphan nuclear receptor family. Sf-1 is mainly expressed in Sertoli cell stromal cells of pituitary, hypothalamus, adrenal gland and testis, granulosa cells and theca cells of ovary. In the pituitary gland, the expression of SF-1 is different between benign and malignant adrenal tumors, such as high expression in nonfunctional adrenal cortical tumors and aldosterone-producing adrenal tumors, low expression in cortisoloma and positively correlated with the size of cortisoloma. Sf-1 can be used in the differential diagnosis of adrenal cortical tumors, pheochromocytoma and renal cell carcinoma.

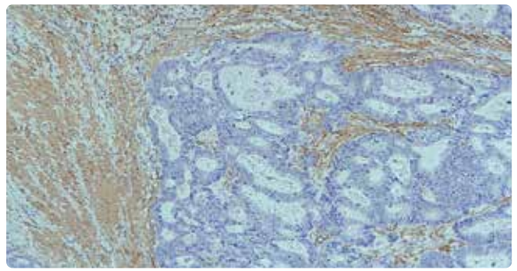


SMA

IVD

- HIER
- Clone 1A4
- Cytoplasm
- Cat.No. GM0851

Smooth Muscle Actin (SMA) mainly marks smooth muscle and myoepithelial cells. It is used to confirm leiomyomas, myoepithelial cells of the breast, salivary glands, and sweat glands.

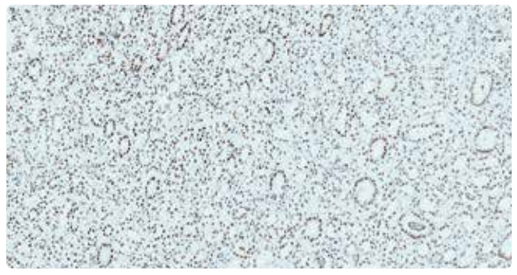


SMARCE1

IVD

- HIER
- Clone EPR8848
- Nucleus
- Cat.No. GT2538

SMARCE1 is part of the ATP-dependent chromatin remodeling complex SWI/SNF, also known as BAF57, involved in chromatin remodeling. SMARCE1 mutations cause clear cell meningiomas (CCMS) of spinal cord and skull origin and can be used as an important marker for the diagnosis of clear cell meningiomas.

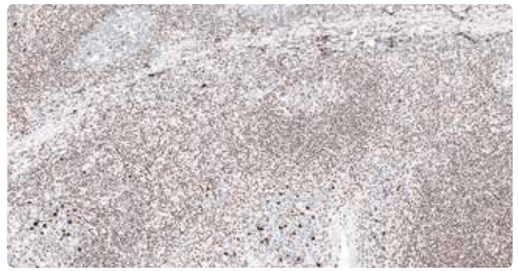


SMARCA2

IVD

- HIER
- Clone GR509
- Cytoplasm/nucleus
- Cat.No. GT2524

BRM, also known as SMARCA2, is a core atpase subunit of the chromatin remodeling complex SWI/SNF and a core protein that regulates nucleosome structural changes and gene transcription. The SWI/SNF chromatin remodeling complex plays an important role in embryonic development, tissue regeneration, cell senescence, apoptosis and cancer suppression. The expression of BRM is reduced or absent in lung cancer, prostate cancer and gastric cancer, which is related to the occurrence and prognosis of cancer.

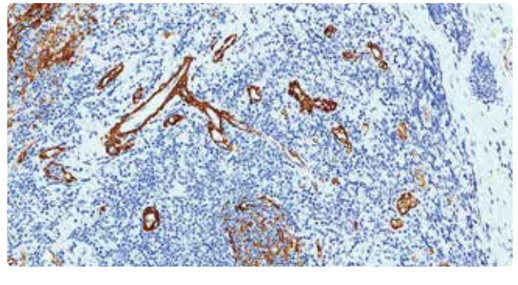


SMMS-1

IVD

- HIER
- Clone GR317
- Cytoplasm
- Cat.No. GM3558

Myosin Heavy Chain (SMMHC) is a structural protein in the cytoplasm of smooth muscle cells, which is related to the contractile function of smooth muscle. It is expressed in the early stages of smooth muscle development and is often used in the diagnosis and classification of mesenchymal tumors. It can also be used for the detection of breast myoepithelial cells, which is helpful to distinguish breast carcinoma in situ from invasive carcinoma.

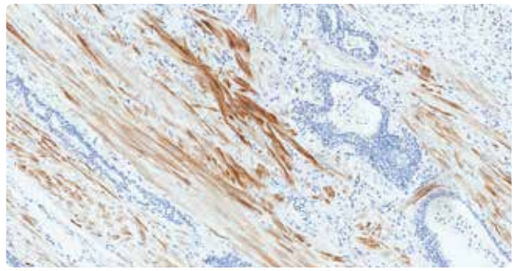


Smoothelin

IVD

- HIER
- Clone R4A
- Cytoplasm/nucleus
- Cat.No. GT2162

Smoothelin is a cytoskeletal smooth muscle-specific protein that is specifically expressed in terminally differentiated contractile smooth muscle cells, but not in proliferative or nonsystolic smooth muscle cells or myofibroblasts. The staining intensity of Smoothelin in the muscularis propria was stronger than that in the muscularis mucosae or arterial wall. Therefore, Smoothelin can be used to help distinguish the muscularis propria from muscularis mucosae in bladder cancer. In addition, Smoothelin was also a specific marker of smooth muscle tumors, and its expression was correlated with the differentiation grade of such tumors.

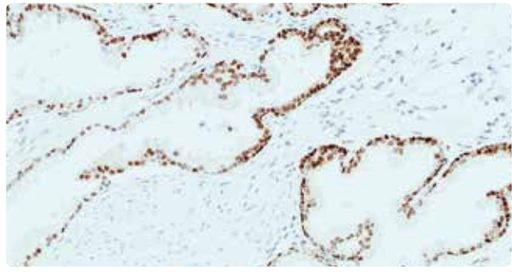


SOX-9

IVD

- HIER
- Clone poly
- Nucleus
- Cat.No. GT2337

Sex determining region Y-box 9 (SOX-9) is a transcription factor related to SRY(sex determining region of the Y chromosome), which affects sex determination and differentiation, and participates in the development of bone, nervous system and pancreas. It has been reported that the expression level of SOX-9 in general chondrosarcoma is significantly higher than that in normal cartilage tissue, and the expression level of SOx-9 is low in dedifferentiated chondrosarcoma. SOX-9 is highly expressed in a variety of tumors, such as prostate cancer, gastric cancer and liver cancer, which is related to the occurrence, development and prognosis of tumors. SOX9 can also be used as a preliminary screen for the differential diagnosis of angiomatoid fibrous histiocytoma.

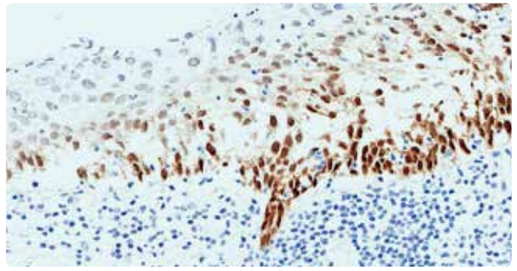


SOX-2

IVD

- HIER
- Clone ZM57
- Nucleus
- Cat.No. GT2163

Sox-2 (SRY-related HSG-box 2 gene) is a major member of the SRy-related SOX family of transcription factors and plays an important role in embryonic development. During the early development of the central nervous system, SOX2 is expressed in all neuroepithelium. Its expression is restricted to glial stem cells, and it is re-expressed in gliomas after malignant transformation of glial cells. SOX-2 is also a novel oncogene, which is not only involved in the early stage of tumorigenesis, but also related to the migration, invasion and metastasis of tumor cells. SOX-2 expression is associated with the prognosis of pancreatic cancer, breast cancer, head and neck cancer, lung squamous cell carcinoma and neuroendocrine carcinoma. It has been reported that the combination of SOX-2 and P63 can specifically detect more than 90% of lung squamous cell carcinomas. In cervical tissue, the expression of SOX-2 is closely related to HPV infection and is related to the progression of cervical hyperplasia.

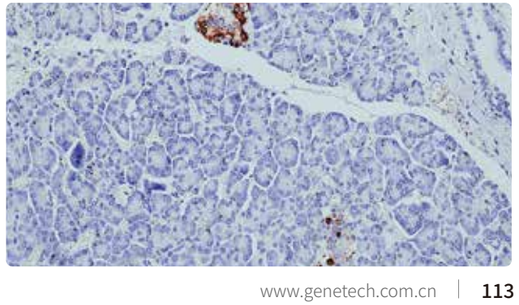


Somatostatin

IVD

- HIER
- Clone H-11
- Cytoplasm
- Cat.No. GA0566

Somatostatin is a polypeptide hormone secreted by islet D cells. Its main role is to inhibit the secretion of various pituitary hormones, gastrointestinal motility and gastrointestinal hormone secretion, etc. It is expressed in the hypothalamus, gastrointestinal tract, bronchus, salivary gland, thymus endocrine cells and part of thyroid C cells. It is mainly used in the functional classification of islet cells and the research of endocrine cells and tumors in gastrointestinal mucosa.

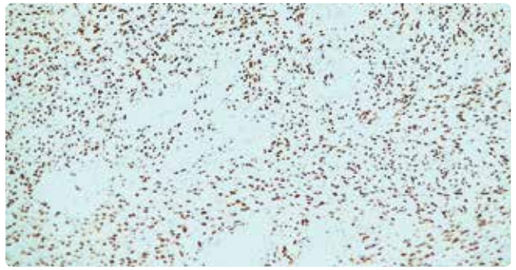


SOX-10

IVD

- HIER
- Clone GM005
- Nucleus
- Cat.No. GT2210

SOX-10 (SRY-related HSG-box 10 gene) is a neural crest transcription factor that plays an important role in the differentiation, maturation, and functional maintenance of Schwann cells and melanocytes. "In normal tissues, it is expressed in Schwann cells, melanocytes, and myoepithelial cells of the salivary glands, bronchies, and mammary glands." It was expressed in almost all nevi and melanomas, neurilemmoma, desmoplastic malignant melanoma, neurofibroma and granular cell tumors. It is also expressed in brain astrocytoma and oligodendroglioma, PTEN, triple negative breast cancer, salivary gland adenoid cystic carcinoma, acinar cell carcinoma and so on. It can be used not only as a marker of Schwannoma and melanocytoma, but also as a marker of myoepithelial tumors of soft tissue. It is mainly used in the research of melanoma and neural crest-derived tumors.

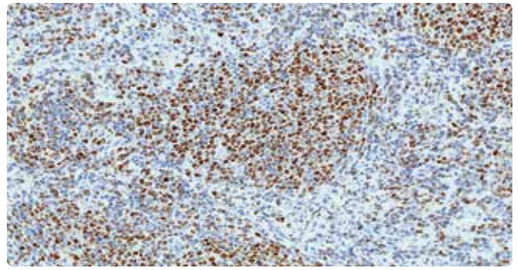


SOX-11

IVD

- HIER
- Clone GR008
- Nucleus
- Cat.No. GT2186

SOX-11 (SRY-related HMG-box 11, sex determining region Y-box 11 gene) is a neural transcription factor related to cell proliferation and differentiation during embryonic development. It is widely expressed in the embryonic period, but rarely expressed in adult tissues and organs. It has been reported that SOX-11 is highly expressed in mantle cell lymphoma, but not in B-cell lymphoproliferative disorders. It is mainly used for the diagnosis of mantle cell lymphoma. SOX-11 positive mantle cell lymphoma belongs to mantle cell lymphoma without germinal center pathway differentiation. It can also be used for the differential diagnosis of high grade pulmonary neuroendocrine tumors from low/intermediate grade pulmonary neuroendocrine tumors and pulmonary non-neuroendocrine tumors. It has prognostic value in epithelial ovarian tumors and high grade breast cancer.

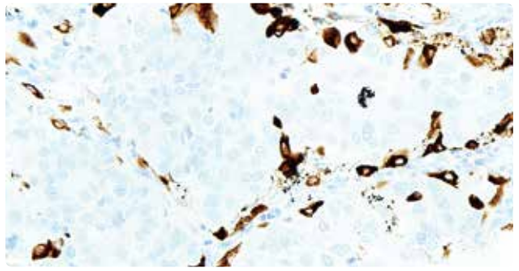


SP-A

IVD

- HIER
- Clone 6F10
- Cytoplasm
- Cat.No. GT2041

Surfactant protenin A (SP-A) is found in type II alveolar epithelial cells of the lung and has A role in maintaining end-expiratory alveolar surface tension. The positive expression of SP-A in bronchoalveolar carcinoma and lung adenocarcinoma is helpful for the differential diagnosis of lung adenocarcinoma and mesothelioma.

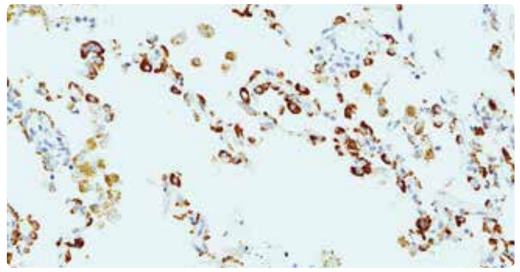


SP-B

IVD

- HIER
- Clone 1B9
- Cytoplasm
- Cat.No. GT2277

SP-B (Surfactant protenin B) is one of the antigenic determinants of the surfactant complex of the lung. Sp-b was mainly expressed in well-differentiated type II alveolar epithelial adenocarcinomas with Calar cell differentiation characteristics. It was often not expressed in poorly differentiated lung adenocarcinomas, and was negative in lung squamous cell carcinoma, large cell carcinoma and non-lung primary adenocarcinoma. The combined expression of TTF-1 can be used for the auxiliary diagnosis of lung cancer and the differential diagnosis of lung adenocarcinoma and metastatic adenocarcinoma.

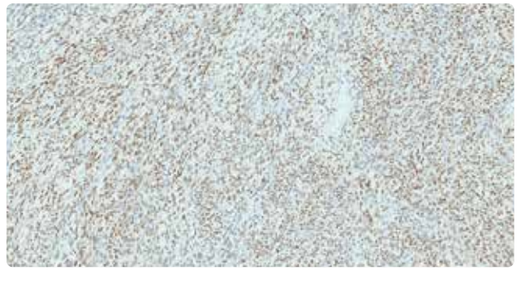


SS18-SSX

IVD

- HIER
- Clone E9X9V
- Nucleus
- Cat.No. GT2561

SS18 gene, located in the q11.2 region of chromosome 18, is an important subunit of chromosome remodeling complex SWI/SNF. SSX genes are a gene family located on chromosome Xp11.2 and consist of nine members (SSX1-9). SS18-SSX fusion protein can form SWI/SNF complex, destroy the role of tumor suppressor gene BAF47(INI-1/SMARCB1) in the complex, bind to SOX2 gene locus, release PRC2-mediated transcriptional repression, activate SOX2 expression, and promote cancer cell proliferation. It has been reported that more than 95% of synovial sarcomas have characteristic t (X; 18) (p11.2; q11.2), resulting in SS18 and SSX gene fusion resulting in chimeric gene fusion. Ss18-ssx can be used as a highly sensitive and specific marker for the diagnosis of synovial sarcoma.

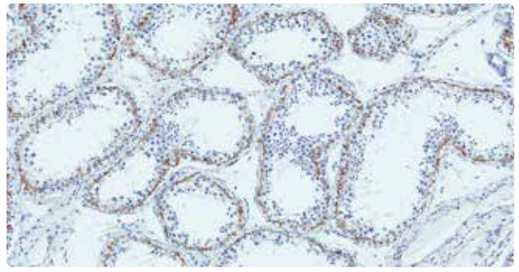


SSTR5

IVD

- HIER
- Clone UMB4
- Membrane
- Cat.No. GT2552

Somatostatin receptor (SSTR) is a multi-channel membrane protein, belonging to the G protein-coupled receptor family. There are five subtypes, SSTR5 is one of them. Sstr5 is expressed in normal small intestine, pituitary gland and pituitary tumor. Five subtypes of receptors were expressed in pituitary endocrine adenomas to varying degrees, among which SSTR2 and SSTR5 had the highest expression levels. SSTR5 is mainly used in the research of various neuroendocrine tumors.

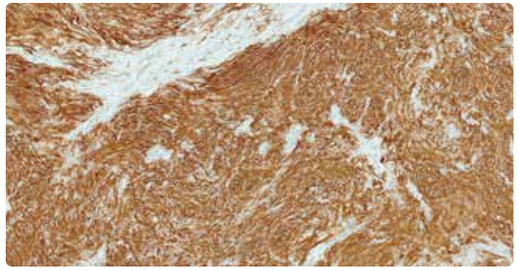


SSTR2

IVD

- HIER
- Clone EP149
- Membrane/Cytoplasm
- Cat.No. GT2379

Somatostatin receptor 2 (SSTR2) is a G-protein coupled cell membrane receptor. Sstr2 is widely expressed in various normal organs and tissues, such as pancreas, brain, kidney, jejunum, colon and liver. In tumors, it is mainly expressed in various neuroendocrine tumors and a variety of solid tumors, such as pancreatic neuroendocrine tumors, pituitary adenomas, meningiomas, breast cancer, small cell lung cancer, and hormone-producing gastrointestinal tumors. The expression is generally positive in normal prostate, but negative in prostate cancer. The data show that SSTR2 can be used as a prognostic marker for octreotide drugs. Peptide receptor radionuclide therapy (PRRT) is one of the treatment methods for patients with metastatic neuroendocrine tumors. If SSTR2 is negative in tumor tissue, radionuclide targeted therapy cannot be used.



STAT3

IVD

- HIER
- Clone 124H6
- Cytoplasm/nucleus
- Cat.No. GT2494

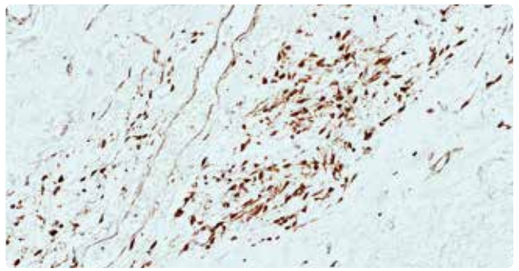
STAT3 belongs to the STAT protein family, which is expressed in a variety of tissues. Under the action of cytokines and growth factors, STAT family members are phosphorylated by receptor-associated kinases, forming homodimers or heterodimers, which are transferred to the nucleus and bind to specific DNA sequences to activate the transcription of target genes. STAT3 is continuously activated in cancers such as prostate cancer, pancreatic cancer, breast cancer, melanoma, multiple myeloma, and ovarian cancer. It regulates a series of genes related to cancer cell survival, proliferation, angiogenesis, invasion, metastasis, drug resistance, and immune evasion, and is generally associated with poor clinical prognosis. Therefore, targeting STAT3 signaling pathway has become a therapeutic target for many cancers.

STAT6

IVD

- HIER
- Clone GR500
- Cytoplasm/nucleus
- Cat.No. GT2295

Signal transducers and activators of transcription 6 (STAT6), a member of the STAT protein family, not only participates in the activation of the IL-4 signaling pathway and the regulation of the immune system, It is also related to cell proliferation and apoptosis. Although solitary fibrous tumors (SFT) can be diagnosed on the basis of histological features and CD34 expression, the diagnosis is sometimes difficult due to its diverse characteristics. Studies have shown that: The NAB2-STAT6 fusion gene is present in most benign and malignant SFT, which leads to the translocation of STAT6 from the cytoplasm into the nucleus, resulting in the strong expression of STAT6 in the nucleus. STAT6 can be used as a highly sensitive and specific marker for SFT, which is helpful for the diagnosis of SFT and differential diagnosis of its similar lesions.

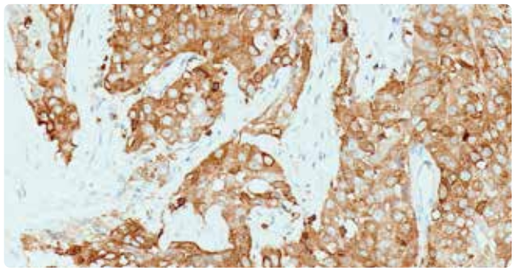


Stathmin

IVD

- HIER
- Clone EP247
- Cytoplasm
- Cat.No. GT2215

Stathmin (microtubule depolymerizing protein) is a widely expressed cytosolic phosphoprotein responsible for the integration of different cellular regulatory signals. It is involved in the control of the G1-S and G2-M checkpoint in the cell cycle and plays an important role in cell proliferation, differentiation, development and organ formation. Overexpression of Stathmin is associated with tumor progression in endometrial cancer, ovarian cancer and oral squamous cell carcinoma. Currently, CIN is mainly detected by p16 immunohistochemical staining, but women with clinically diagnosed CIN may be overtreated because the p16 positive rate of CIN1 is approximately 70%. Stathmin is rarely expressed in CIN1 (9%), while stably expressed in CIN2 (45%) and CIN3 (93%).

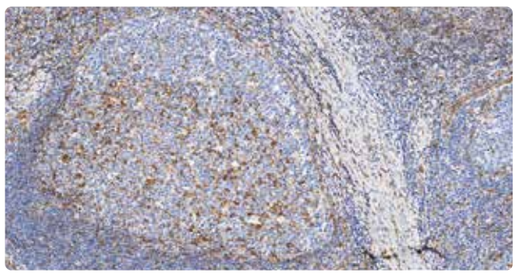


STING

IVD

- HIER
- Clone GR514
- Membrane/cytoplasm
- Cat.No. GT2493

STING, the full name of stimulator of interferon genes, is a transmembrane protein. It is an important adaptor protein in the innate immune signaling pathway. It can recognize viral and bacterial infections and initiate the innate defense and immune response of the body. Activation of STING pathway can induce the expression and secretion of type I interferon and other pro-inflammatory factors, activate innate immune response, promote anti-tumor immune response, and achieve the purpose of treating tumors. Inhibition of STING signaling has been observed in several cancer cell lines, and STING protein expression decreases with the progression of some cancer types, such as melanoma.

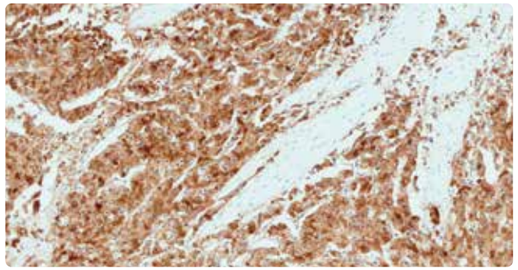


Survivin

IVD

- HIER
- Clone EP2880Y
- Cytoplasm/nucleus
- Cat.No. GT2048

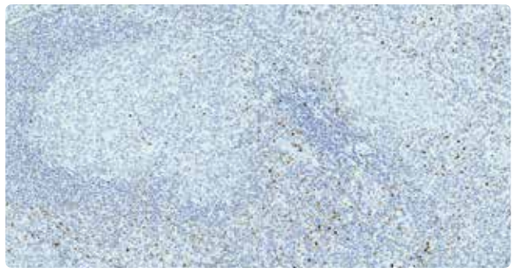
Survivin, a member of the inhibitor of apoptosis family, is closely related to the formation of microtubules during mitosis. This protein is mainly expressed in the G2/M phase of the cell cycle and overexpressed in a variety of tumors, suggesting that it plays an important role in the occurrence and development of tumors.



T-bet

- HIER
- Clone GR026
- Nucleus
- Cat.No. GT2482

T-box transcription factor TBX21, also known as T-bet, is a member of the T-box family of transcription factors. T-bet is specifically expressed on developing and established Th1 cells but not on naive Th0 cells, and is a key lineage-defining transcription factor that directs the development of Th1 cells. T-bet is expressed in B-cell lymphoproliferative disorders, especially in the early stages of B-cell development, including precursor B-cell lymphoblastic leukemia, mature B-cell lymphoma, marginal zone lymphoma, and hairy cell leukemia. In contrast, B-cell lymphomas derived from pre-germinal center and germinal center are T-bet-negative, including mantle cell lymphoma, follicular lymphoma, diffuse large B-cell lymphoma, and Burkitt lymphoma.

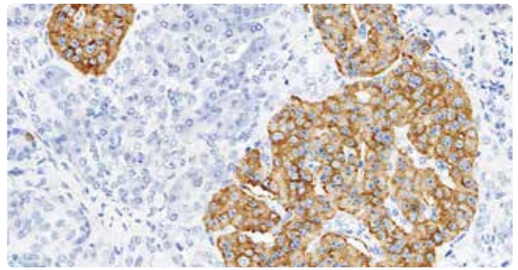


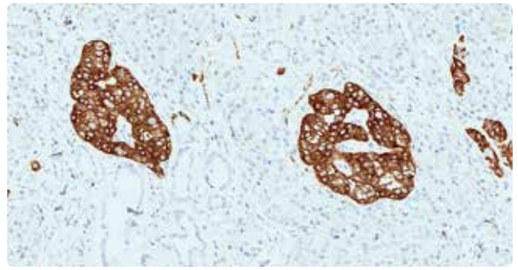
Synaptophysin

IVD

- HIER
- Clone SP11/GR306
- Cytoplasm
- Cat.No. GT2065/GT2534

Syn (Synaptophysin) is an acidic glycoprotein. It is present in the neuronal anterior vesicle membrane and is one of the specific markers of neuroendocrine tumors. It is mainly expressed in the presynaptic membrane of neurons and neuroendocrine cells and their tumors in the adrenal medulla, carotid body, skin, pituitary, thyroid, lung, pancreas and gastrointestinal mucosa. This antibody is commonly used to label neuroendocrine tumors.



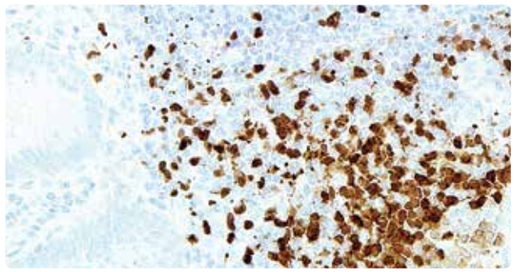


TCL1

IVD

- HIER
- Clone EP105
- Cytoplasm/nucleus
- Cat.No. GT2259

T cell leukemia/lymphoma protein 1 (TCL1) is present in the nucleus and cytoplasm of lymphoid cells during early embryonic development. It can be used to distinguish B-cell lymphoma, T-cell lymphoma, CD30-positive degenerative large cell lymphoma, multiple myeloma and marginal zone B-cell lymphoma.

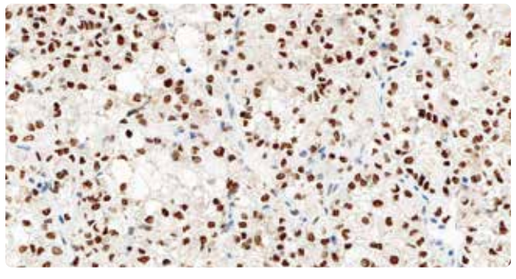


TFE3

IVD

- HIER
- Clone EP285
- Nucleus
- Cat.No. GT2166

TFE3 (Transcription factor E3, transcription factor 3) is a member of the MiT transcription factor family. It is involved in cell growth and maintenance, DNA-dependent transcription regulation, tRNA amination during protein translation and so on. TFEF3 protein is expressed in a variety of tissues, especially in the genitourinary tract. Tfe3-positive perivascular epithelioid cell tumor (PEComa) has special clinical features. The tumor cells are epithelioid or spindle-shaped.

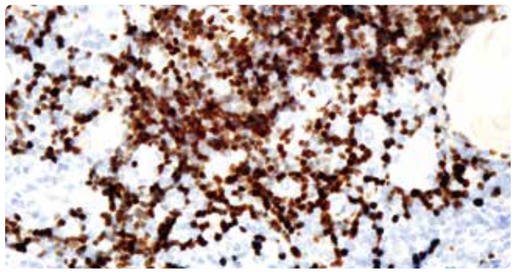


TdT

IVD

- HIER
- Clone SEN28
- Nucleus
- Cat.No. GT2025

TdT (Terminal deoxynucleotidyl transferase) is a 58kDa DNA polymerase located in the nucleus that catalyzes the polymerization of 3 '-terminal deoxynucleosides. This antibody labels precursor B and T lymphocytes in normal thymus and bone marrow. TdT is highly expressed in the tumor cells of mature lymphoma and acute lymphoblastic leukemia, which is helpful for the differentiation of lymphocytic leukemia from Hodgkin's lymphoma.

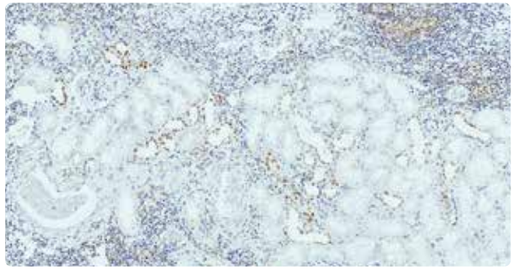


TFEB

IVD

- HIER
- Clone EPR22940-151
- Cytoplasm/nucleus
- Cat.No. GT2537

Transcription factor EB (TFEB) belongs to the microphthalmia related transcription factor MiTF gene family, which is the central regulator of autophagy/lysosome-nuclear signaling pathway. It is involved in the regulation of mTOR and ERK signaling pathways, and is controlled by a variety of upstream factors, such as nutrient deficiency and external stress, which affects its subcellular localization. Impaired autophagy-lysosome function caused by TFEB deficiency is closely related to the occurrence of many diseases, such as lysosomal storage disorders, neurodegenerative diseases, cancers and metabolic diseases.

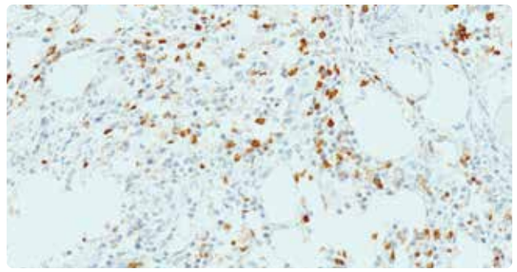


TGF-β1

IVD

- HIER
- Clone TB21
- Membrane/cytoplasm
- Cat.No. GT2343

Transforming growth factor-β1 (TGF-β1) is a pleiotropic growth factor, which has a potential inhibitory effect on the proliferation of epithelial cells and can inhibit the growth of tumors. It can be used in the research of many malignant tumors such as bladder cancer, lung cancer, kidney cancer, prostate cancer, gastric cancer, colon cancer, etc.

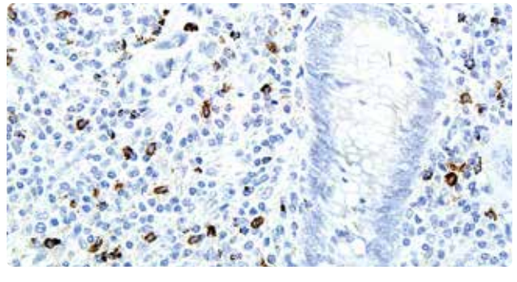


TIA-1

IVD

- HIER
- Clone 2G9A10F5
- Cytoplasm
- Cat.No. GT2092

TIA-1 (T-cell intracellular antigen-1, T-cell restricted intracellular antigen-1) is a cytotoxic particle-associated protein. It is located in a class of lymphocytes with cytolytic capacity. TIA-1 is mainly cytotoxic cells in the inactive state, and is positively expressed in T cell or NK cell derived tumors. It is also expressed in large granular lymphocytic leukemia and hairy cell leukemia. "TIA-1 expression in T-cell malignancies may help distinguish large granular lymphocytic leukemia (high expression) from T-lymphocytosis and other T-cell disorders (low expression)." All B-cell lymphocyte-derived lymphomas showed negative expression.

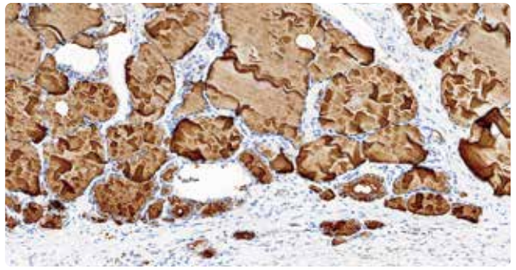


THY

IVD

- HIER
- Clone 2H11/6E1
- Cytoplasm
- Cat.No. GT2122

THY (Thyroglobulin, TG, thyroglobulin) is a kind of glycoprotein, as the precursor of thyroid hormone, which is synthesized by thyroid cells and transported to the cell surface, secreted into the gland cavity of thyroid follicles, where it is stored to form the main component of colloid (> 95%). Hormone release requires uptake of TG from glial cells by thyrocytes and its hydrolysis through the lysosomal pathway. This antibody marks thyroglobulin in thyroid tissue and can be used to diagnose well-differentiated thyroid cancer.

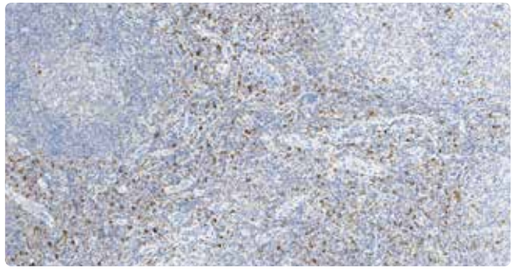


TIM3

IVD

- HIER
- Clone GR505
- Membrane/cytoplasm
- Cat.No. GT2510

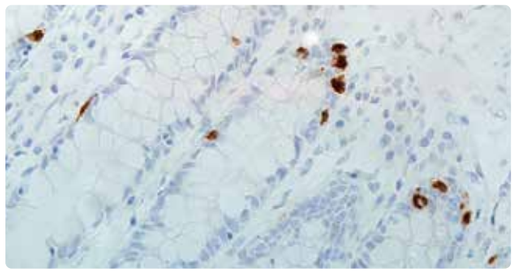
TIM3 (T cell immunoglobulin domain and mucin domain-3, also known as CD366,HAVCR2 (hepatitis A virus cell receptor 2)) is a negative regulator of anti-tumor immunity. Tim-3, an important member of the TIM family, was first identified as a specific marker of fully differentiated IFN-γ-secreting CD4+T helper 1 (Th1) and CD8+ cytotoxic T cells. Subsequently, it was found that TIM-3 was also expressed on the cell surface of Regulatory T cells (Treg), monocyte-macrophages and Dendriticcells (DCs).



TIMP-1

- HIER
- Clone 102D1
- Cytoplasm
- Cat.No. GT2232

TIMP-1 (tissue inhibitor of metalloproteinase-1) and tissue inhibitor of metalloproteinase-2 (TIMP-2) are inhibitor enzymes of the matrix metalloproteinases (MMP) family. TIMP-1 and TIMP-2 can inhibit the activation of some matrix metalloproteinases by binding to their hemagglutinin-like domains. Among them, TIMP-1 mainly inhibits the activation of MMP-9, and TIMP-2 mainly inhibits the activation of MMP-2. The balance between TIMPs and MMP plays a very important role in maintaining the integrity of connective tissue. MMP activity is enhanced in many tumor tissues. TIMPs can inhibit the invasion of tumor cells and placental trophoblast cells through protein degradation mechanism.

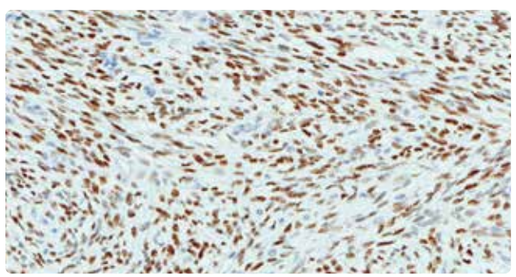


TLE-1

IVD

- HIER
- Clone ZM93
- Nucleus
- Cat.No. GT2239

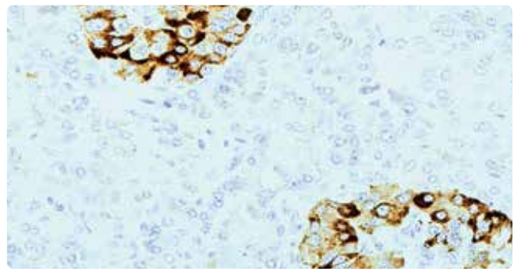
Tle-1 (Transducin like enhancer of split 1), a member of the TLE gene family, is involved in hematopoietic, neural and terminal epithelial differentiation. Tle-1 is expressed in basal cells, adipocytes, peripheral nerve cells, endothelial cells and mesothelial cells. It is specifically expressed in synovial sarcoma and rarely expressed in schwannoma and pleomorphic sarcoma. TLE1 is more sensitive and specific than Bcl-2, EMA and CK in synovial sarcoma, and can be used as a marker for the differential diagnosis of synovial sarcoma from other types of tumors.



TIMP-2

- HIER
- Clone 3A4
- Cytoplasm
- Cat.No. GT2233

TIMP-2 (tissue inhibitor of metalloproteinase-2) and tissue inhibitor of metalloproteinase-1 (TIMP-1) are inhibitor enzymes of the matrix metalloproteinases (MMP) family. TIMP-2 has the highest affinity for MMP-2. In addition, TIMP-2 can also bind to MMP-9 and inhibit proteolytic activity. TIMP-2 can inhibit the invasion of tumor cells and normal placental trophoblast cells through proteolytic mechanism.

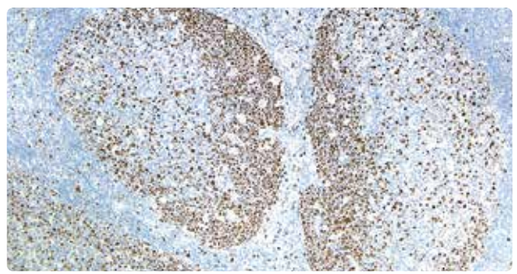


TOP II α

IVD

- HIER
- Clone GR003
- Nucleus
- Cat.No. GM7186

Topoisomerase IIα (topoisomerase IIα /TOP2A) is a nuclear matrix enzyme protein with phosphodiesterase activity, and its content is increased during cell proliferation. The expression level of TOP IIα is closely related to the prognosis of cancer patients, which directly affects the choice of chemotherapy drugs. The reduction of the expression level will lead to the resistance of TOP II inhibitors. It is often used as an indicator of tumor multidrug resistance and as a target of anticancer drugs.

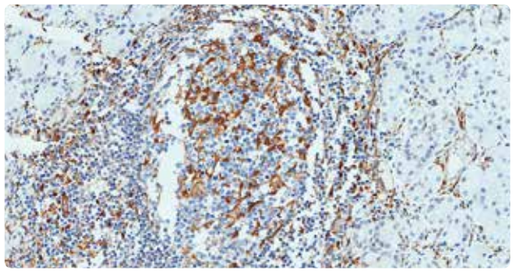


TP

IVD

- HIER
- Clone P-GF.44C
- Cytoplasm/nucleus
- Cat.No. GT2372

TP (Thymidine Phosphorylase) is a protein with a molecular weight of 55KDa. It has angiogenic activity and is structurally similar to PD-ECGF (platelet-derived endothelial cell growth factor) and has the same effect. Generally, the two names are used equally. TP can activate the prodrug of 5-fluorouracil to 5-Fu, thereby enhancing the chemosensitivity of 5-fluorouracil. TP is not only related to cancer treatment, but also may promote the growth and metastasis of cancer cells through angiogenesis. TP antibody is mainly used in the research of malignant tumors and drug resistance.

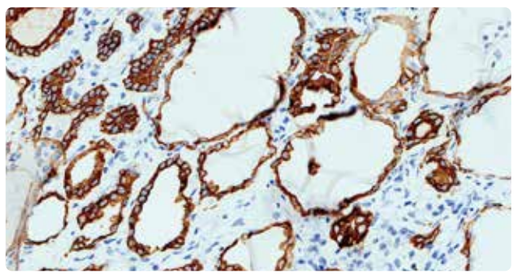


TPO

IVD

- HIER
- Clone AC25/EP159
- Cytoplasm
- Cat.No. GT2167/GT2440

Thyroid peroxidase (TPO) is synthesized by thyroid follicular cells and located on the top free surface of thyroid epithelial cells. It is directly involved in the oxidation of iodine in thyroid cells, the iodination of tyrosine and the coupling of iodine-tyrosine. It is highly expressed in normal, hyperplastic and most benign tumor thyroid tissues, but the expression of TPO is significantly reduced in thyroid malignant tumors. This antibody is mainly used in the differential diagnosis of benign and malignant thyroid tumors.

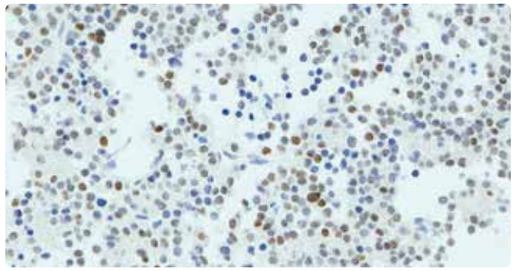


T-PIT

IVD

- HIER
- Clone CL6251
- Nucleus
- Cat.No. GT2318

T-PIT is an opioid-melanocortin (POMC) lineage and corticotrophin cell transcription factor. According to the differentiation lineage of pituitary adenoma cells, pituitary tumors are divided into eosinophilic lineage, corticotrophin lineage and gonadotrophin lineage. T-PIT is an important transcription factor of corticotrophin lineage. It is often used in combination with SF-1, GATA-2, ERα, PIT-1, etc.

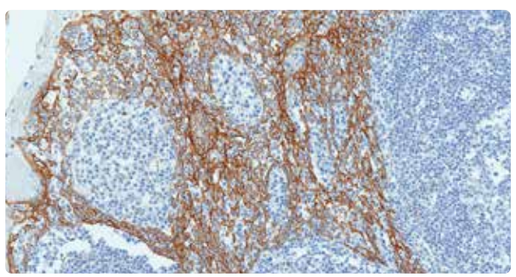


TRIM29

IVD

- HIER
- Clone GM505
- Membrane/cytoplasm
- Cat.No. GT2422

TRIM29 protein belongs to TRIM protein family, which is an E3 ubiquitin ligase. It plays a very important role in tumor proliferation, invasion and metastasis, drug resistance and tumor immunity, and its function is cell and tissue specific. Studies have shown that the expression of TRIM29 is significantly up-regulated in bladder, colon, ovary, endometrial cancer and multiple myeloma, while it is significantly down-regulated in melanoma, head and neck, breast and prostate cancer. In addition, in poorly-differentiated NSCLC, most poorly-differentiated lung squamous cell carcinomas showed strong or positive TRIM29 expression, while poorly-differentiated lung adenocarcinoma showed weak TRIM29 expression, mostly weakly positive and no strong positive TRIM29 expression. TRIM29 can be used to distinguish lung squamous cell carcinoma and adenocarcinoma. Routine combination of TRIM29 immunohistochemistry can significantly improve the accuracy of pathological diagnosis and reduce misdiagnosis.

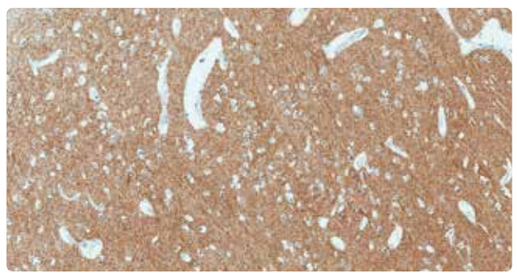


TRK(PAN)

IVD

- HIER
- Clone EPR17341
- Cytoplasm
- Cat.No. GT2467

Pan-TRK contains three targets, TRKA/TRKB/TRKC. It is helpful in the diagnosis of breast secretory carcinoma, salivary gland carcinoma and so on. Pan-TRK IHC is recommended by ESMO guidelines for NTPK fusion mutation screening and cross-validation.

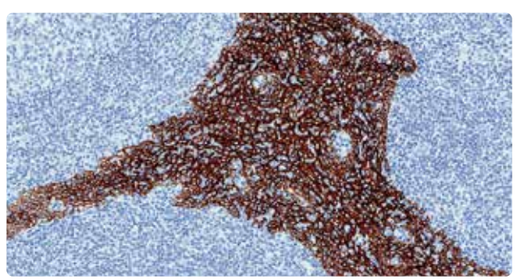


TROP2

IVD

- HIER
- Clone EPR20043
- Membrane/cytoplasm
- Cat.No. GT2462

TROP2 belongs to the TACSTD family and is a cell surface glycoprotein encoded by the TACSTD2 gene. TROP2 is normally expressed in epithelial cells and plays an important role in the development of embryonic organs. The expression of TROP-2 in normal tissues is very low, and it is overexpressed in a variety of malignant tumors. Trop-2 is an oncogene related to the occurrence, invasion and metastasis of malignant tumors.

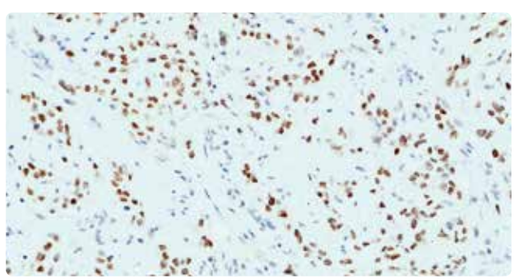


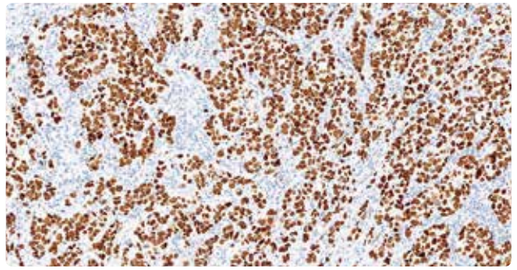
TRPS1

IVD

- HIER
- Clone EPR16171/GR108
- Nucleus
- Cat.No. GT2454/GT2554

The Transcriptional Repressor GATA Binding 1 (TRPS1) belongs to the GATA transcription factor family. It is located in human chromosome 8q23-24 and functions as a nuclear zinc finger protein. TRPS1 is aberrantly expressed in a variety of human solid malignant tumors. The protein encoded by TRPS1 shows specific expression in different tumor tissues, and the expression level is different due to the different tissue source of the tumor. Previous studies have shown that TRPS1 marker has good specificity and sensitivity for all types of breast cancer, especially for triple-negative breast cancer.



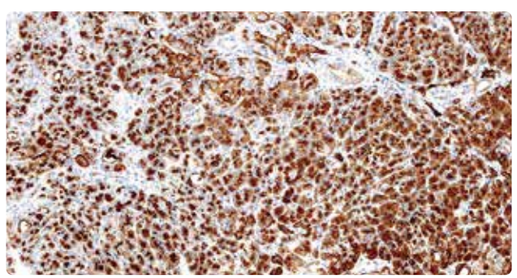


Trypsin

IVD

- HIER
- Clone EPR19498-43
- Cytoplasm
- Cat.No. GT2549

Trypsin is a kind of peptide chain endonuclease, which can cut the carboxyl termini of lysine and arginine residues in polypeptide chain. In addition, it can also limit the decomposition of the precursors of other enzymes such as chymotrypsin, carboxypeptidase, and phospholipase, and play an activation role. It is the most specific protease and becomes an indispensable tool in determining the amino acid arrangement of a protein. A traditional immunohistochemical marker commonly used in the diagnosis of pancreatic acinar cell carcinoma (PACC).

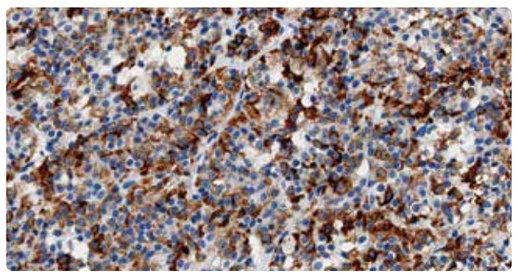


TSH

IVD

- HIER
- Clone TSH01+TSH02
- Cytoplasm
- Cat.No. GT2046

Thyroid stimulating hormone (TSH) is a glycoprotein hormone secreted by anterior pituitary basophils, which can stimulate thyroid growth and the secretion of thyroxine. It is mainly used for functional classification of pituitary tumors.

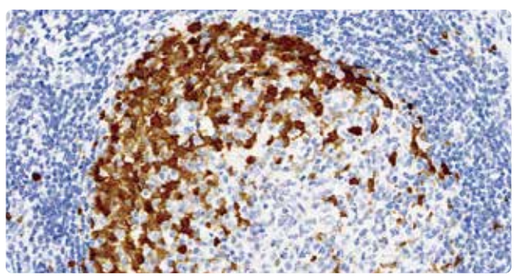


TS

IVD

- HIER
- Clone GM509
- Cytoplasm/nucleus
- Cat.No. GM3614

Thymidylate synthase (TS), a dimeric protein composed of two identical subunits, is a key enzyme in DNA biosynthesis and a targeted enzyme for 5-FU-based therapy. The coding gene is located on chromosome 18p11.32. The polymorphism of TS gene may lead to the change of enzyme activity or function, which may affect the individual susceptibility to cancer, the sensitivity of cancer patients to chemotherapy drugs and even the prognosis. The expression of TS is closely related to the malignant biological behavior of tumors.

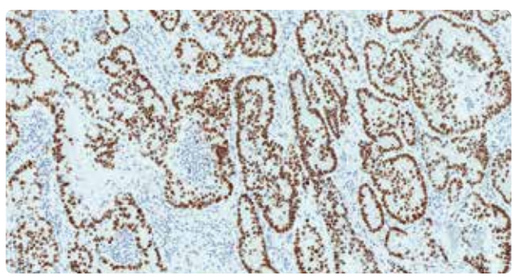


TTF-1

IVD

- HIER
- Clone SPT24
- Nucleus
- Cat.No. GT2180

TTF-1 (Thyriod transcription factor-1) is a nuclear protein mainly expressed in the epithelial cells of the thyroid and lung. Ttf-1 antibody is positive in papillary thyroid carcinoma. In the study of lung tumors, it was found that TTF-1 was positive in most small cell lung cancers, lung adenocarcinomas, most atypical lung neuroendocrine carcinomas and a few large cell undifferentiated lung carcinomas, but negative in lung squamous cell carcinomas and most typical lung carcinoids. This antibody is mainly used in the classification of lung and thyroid tumors, and can also be used to distinguish lung adenocarcinoma from squamous cell carcinoma.

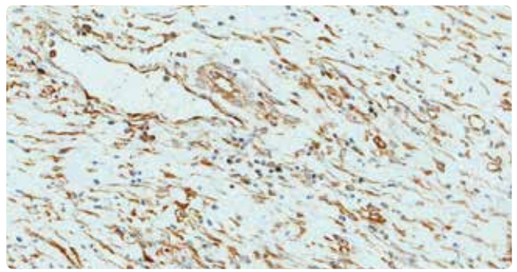


Tubulin β

IVD

- HIER
- Clone 37B
- Cytoplasm
- Cat.No. GT2373

Tubulinβ (Tubulin) is a cytoskeletal protein of cells. Tubulin can be divided into α, β, γ, δ, ε and so on. Among them, α-tubulin and β-tubulin can form heterodimers and are the two main types of tubulin that form microtubules. Studies have confirmed that the abnormal expression of Tubulinβ occurs in rectal cancer, breast cancer, glioma and other tumors. This antibody is mainly used to study the sensitivity of tumor cells to drugs.

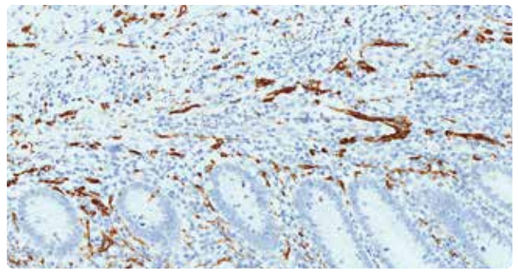


Tubulin β III

IVD

- HIER
- Clone TUJ1
- Cytoplasm
- Cat.No. GT2168

TubulinβIII is mainly involved in the formation of cytoskeleton, and its key function is to maintain the stability of centrosome, chromosome movement and mitosis. It is also one of the targets of many chemotherapy drugs. Overexpression of TubulinβIII is an important mechanism of paclitaxel resistance. Low expression of TubulinβIII is highly sensitive to paclitaxel and has good efficacy. It is mainly used in the research of ovarian cancer, prostate cancer and lung non-small cell cancer.

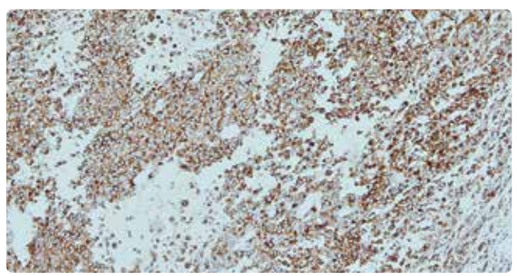


Tyrosinase

IVD

- HIER
- Clone T311
- Cytoplasm
- Cat.No. GT2089

Tyrosinase (tyrosine kinase), which is found in the melanosomes in melanocytes, can convert tyrosine into melanin and plays an important role in the formation of melanin in melanocytes. It is one of the important markers of melanoma, and its sensitivity is more than 80%. It is specifically expressed in non-spindle cell melanoma, but not expressed in non-neoplastic melanocytes and nevi cells.

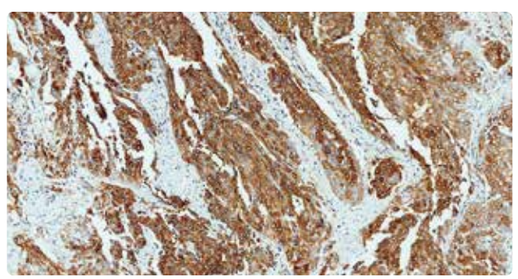


Uroplakin II

IVD

- HIER
- Clone BC21
- Membrane/cytoplasm
- Cat.No. GT2423

Uroplakins II is a urothelial cell differentiation-specific glycoprotein, which is mainly expressed in the umbrella cell layer of the transitional epithelium of the urinary tract, and a small amount of cells are also expressed in the middle layer. Uroplakins II is a marker of transitional cell carcinoma. It is expressed specifically in the transitional epithelium and differentiation-dependent, and is extremely important for the diagnosis of metastasis. UroplakinII is as specific as UroplakinIII, but more sensitive.

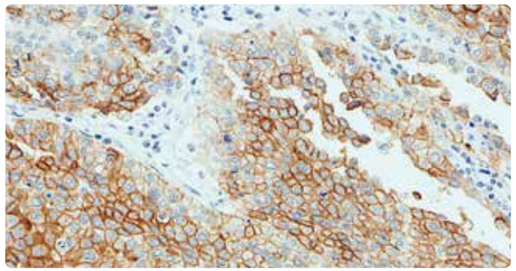


Uroplakin III

IVD

- HIER
- Clone EP321
- Membrane/cytoplasm
- Cat.No. GT2173

Uroplakin III is an asymmetric unit glycoprotein. It is expressed on the surface of urothelial cells in the renal pelvis, ureter, bladder, and urethra. "About 60% of human TC-derived tumors focally express Uroplakin III (sometimes at very low levels)." In urothelial tumors, loss of Uroplakin III expression is often associated with high tumor grade, myometrial invasion, and lymphatic metastasis. Literature suggests that Uroplakin III is specifically expressed in p63-negative urothelial tumors, including undifferentiated carcinoma; It is also expressed in Paget's disease of the vulva associated with urothelial carcinoma. It is mainly used in the diagnosis of urothelial tumors.

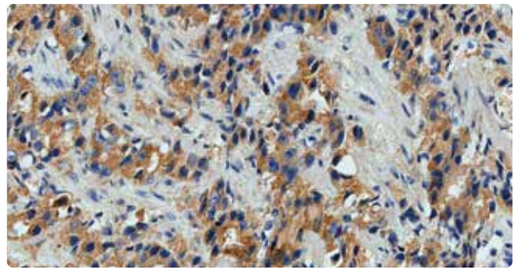


VEGF

IVD

- HIER
- Clone VG1
- Cytoplasm
- Cat.No. GT2170

Vascular endothelial growth factor (VEGF) is a heparin-binding growth factor specific for vascular endothelial cells, which can induce angiogenesis in vivo. It is a highly conserved homodimeric glycoprotein. It is widely distributed in brain, liver, kidney, spleen, lung and bone tissues. It plays an important role in the angiogenesis of tumor tissue, and is closely related to tumor growth, invasion and metastasis. The expression level of VEGF is positively correlated with the growth of blood vessels in the tumor and the risk of tumor metastasis. It is mainly used in the research of various tumors.

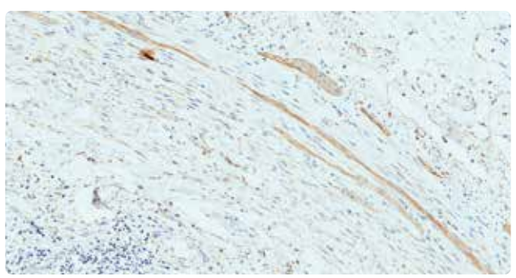


VEGFR2

IVD

- HIER
- Clone D-8
- Membrane/cytoplasm
- Cat.No. GT2361

Vascular endothelial growth factor receptor 2(VEGFR2) is the receptor of VEGF. After binding to its ligand VEGF, it promotes the division, proliferation and migration of vascular endothelial cells through a series of regulatory mechanisms, so as to play an important role in tumor angiogenesis. For example, VEGFR2 may promote the occurrence and development of blood vessels in colorectal adenocarcinoma and promote the progression of colorectal adenocarcinoma.



VEGFR3

IVD

- HIER
- Clone EPR28713-56
- Membrane/cytoplasm
- Cat.No. GT2424

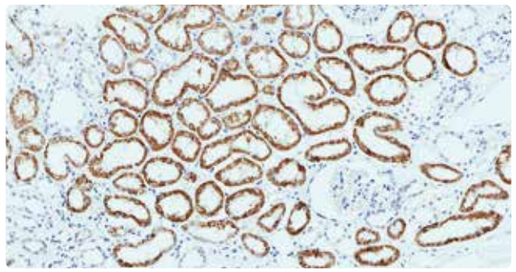
Vascular endothelial growth factor receptor 3(VEGFR3), also known as Flt4, binds to its ligand VFGF-C/D to induce the proliferation and migration of endothelial cells and regulate the occurrence of blood vessels and lymphangiogenesis. Vegfr3 is mainly expressed in lymphatic endothelial cells in adult tissues, so it can be used as a special marker of lymphatic endothelial cells.

VHL

IVD

- HIER
- Clone GM300
- Cytoplasm
- Cat.No. GT2250

VHL (Von hippel-lindau) is a tumor suppressor gene. VHL gene alterations are associated with a diverse group of tumors including hemangioblastoma, renal clear cell carcinoma (RCC) and pheochromocytoma. Two transcription elongation factors, ElonginB and C, have been shown to bind to a short collinear domain of the VHL protein both in vitro and in vivo, which is frequently mutated in tumors. pVHL may function as a negative regulator of transcription elongation in vivo.

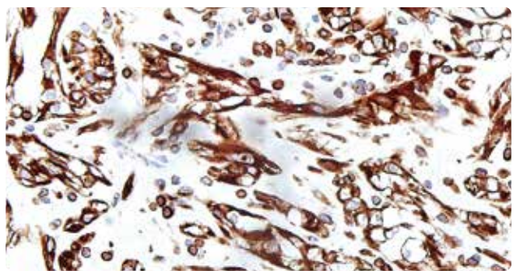


Vimentin

IVD

- HIER/LIER
- Clone V9
- Cytoplasm
- Cat.No. GM0725

Vimentin (vimentin) is a specific marker of normal mesenchymal cells and the tumors from which they arise. It is expressed during cell development and differentiation in various mesenchymal cells and cell types derived from the mesoderm. "In addition to mesenchymal cells, it is also expressed in the kidney, urethra, gonads (excluding germ cells), genital ducts, and the cortex of the adrenal gland." Therefore, vimentin is a relatively specific marker of mesenchymal cells and tumors of their origin, and can also be used to distinguish endometrial carcinoma (+) from cervical adenocarcinoma (-).

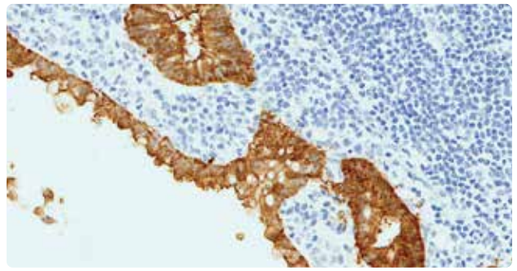


Villin

IVD

- HIER
- Clone GR303
- Cytoplasm/brush border
- Cat.No. GT2052

Villin (villin) is a calcium-dependent actin-binding protein that is mainly distributed in the brush border of the intestinal epithelium and the proximal convolulated tubular epithelium of the kidney. It is a specific marker for pancreatic cancer and gastrointestinal adenocarcinomas, and almost 100% of colon adenocarcinomas express villin. Villin was also expressed in Merkel cell carcinoma, lung adenocarcinoma, ovarian cancer and renal cell carcinoma.

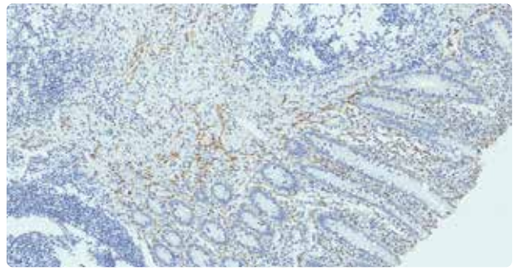


VIP

IVD

- HIER
- Clone poly
- Cytoplasm
- Cat.No. GT2489

Vasoactive intestinal peptide (VIP), also known as vasodilator intestinal peptide, is a kind of neurotransmitter, which exists in the central nervous system and enteric nervous system, and is mainly released by intestinal neurons. VIP plays a dual role in organisms, being both a gastrointestinal hormone and a neuropeptide. The change of VIP level is related to a variety of clinical diseases, especially to gastrointestinal diseases, and it is an important indicator for gastrointestinal diseases research.

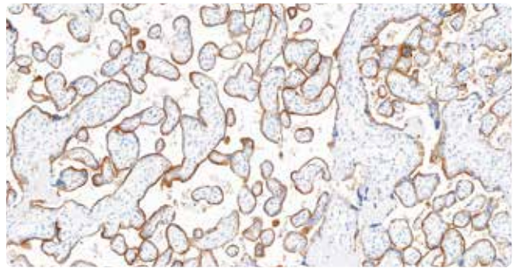


VISTA

IVD

- HIER
- Clone SP345
- Cytoplasm
- Cat.No. GT2461

VISTA (V-domain Ig suppressor of T-cell activation) is one of the molecules that regulate immunity. It has a similar structural fragment with PD-1, also known as PD-1H. It is expressed in a variety of tumors, such as hepatocellular carcinoma, gastric cancer, lung cancer and so on. High expression of VISTA is often accompanied by high expression of PD-1, which can predict the survival rate of patients.

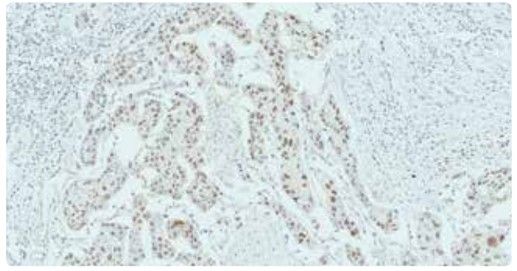


Wnt9b

IVD

- HIER
- Clone poly
- Cytoplasm/nucleus
- Cat.No. GT2574

Wnt9b, one of 19 Wnt family proteins, is essential for the development of mesonephric and metanephric tubules and for the caudal extension of Muller's ducts. Dysregulation of Wnt9b signaling is associated with developmental diseases and cancers. Wnt9b was reported to be a highly sensitive marker of breast cancer. Its expression was weak and patchy in normal ductal epithelial cells and completely negative in myoepithelial cells, but diffusely and strongly positive in most breast cancer cells. Wnt9b is also a highly sensitive marker of triple-negative breast cancer (including metaplastic breast cancer).

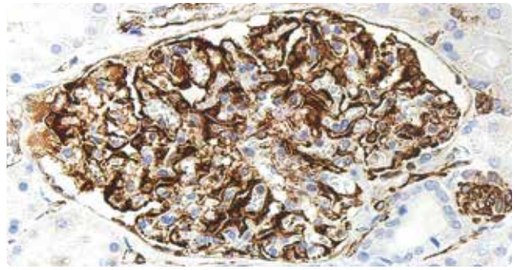


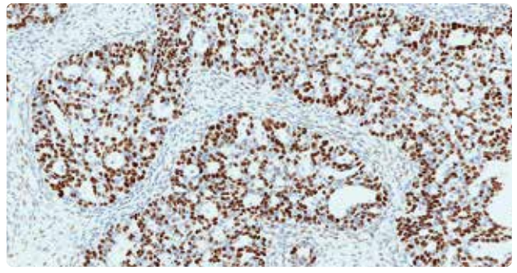
WT1

IVD

- HIER
- Clone 6F-H2/EP122
- Nucleus
- Cat.No. GM3561/GT2450

Wilms' Tumor 1 (WT1) is encoded by the WT1 gene on chromosome 11 and plays an important role in the development of the normal urogenital tract. wilm's tumor is named after its mutation and inactivation. It can bind to p53 in cells to exert its tumor suppressor effect. It was expressed in 75% of mesothelial benign and malignant tumors, fallopian tube epithelium and fallopian tube/ovarian serous adenocarcinoma (nuclear positivity). At present, WT-1 can be used for the diagnosis and differential diagnosis of fallopian tube/ovarian serous adenocarcinoma; Differential diagnosis between metastatic endometrial serous adenocarcinoma and primary endometrial serous adenocarcinoma (primary endometrial is often negative); Auxiliary markers of mesothelial origin; Auxiliary markers of ovarian sex cord-stromal tumors.



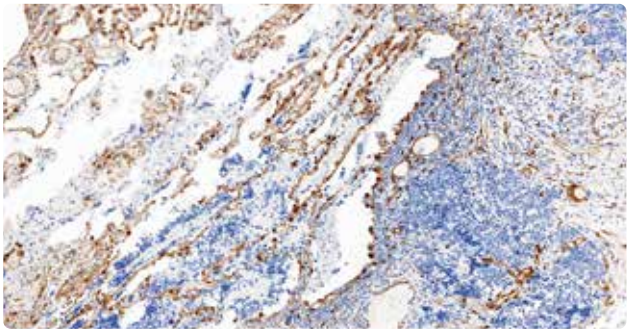


YAP1

IVD

- HIER
- Clone GR513
- Cytoplasm/nucleus
- Cat.No. GT2540

YAP1 (Yes-associated protein 1) is an important signal transduction molecule, which belongs to the core member of Hippo signaling pathway. It regulates biological processes such as cell proliferation, apoptosis and stem cell self-renewal by nuclear translocation and binding specific transcription factors. The abnormal expression of YAP1 is closely related to the occurrence and development of a variety of tumors, such as liver cancer, pancreatic cancer, lung cancer, etc. Yap1 may become a potential target for cancer treatment.

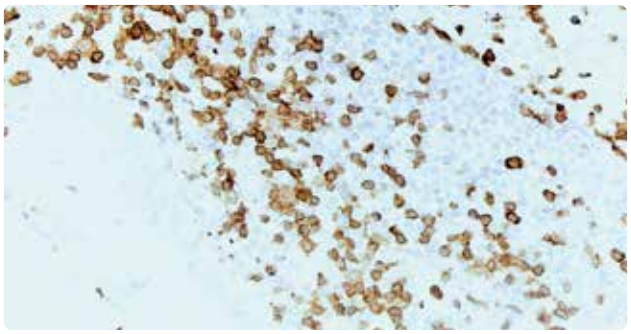


ZAP-70

IVD

- HIER
- Clone 2F3.2
- Cytoplasm
- Cat.No. GT2053

ZAP-70, a tyrosine kinase of Syk family, is mainly expressed in T cells, NK cells, mast cells and basophils. Zap-70 can also be detected in normal precursor B cells, but it is not expressed in normal mature B cells. ZAP-70 is closely related to the formation of non-mutant structures of immunoglobulin heavy chain variable region (IgVH) genes in chronic lymphocytic leukemia. Zap-70 antibody can be used as an independent prognostic indicator of chronic lymphocytic leukemia, which is of great significance for clinical treatment.



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