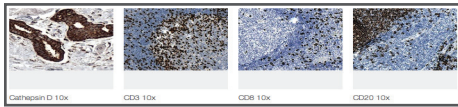


Immunohistochemistry



Immunohistochemistry (IHC) utilizes enzyme-based reactions in conjunction with mono- or polyclonal antibodies to evaluate protein expression levels at the cellular and subcellular level in tissues. IHC assists in identifying the distribution and localization of biomarkers and aids in diagnosis and targeted therapy selection. Digital imaging of stained slides is available in-house. In addition, we are experienced with the validation and use of new IHC markers.

IHC markers

Akt, protein kinase
Alpha fetoprotein
Anaplastic lymphoma kinase -1
Annexin A1, hairy cell, B-cell lymphoma
Androgen receptor
Anti-Caldesmon, smooth muscle
BCL2 follicular lymphoma, apoptosis inhibiting protein
BCL6 follicle center B-cell
CA 125 epithelial malignancies ovary, breast
CA 19-9 pancreas, liver, ovary, lung tumors
Calcitonin
Calretinin, calcium binding protein
Carcinoembryonic antigen (CEA)
Cathepsin D, breast carcinoma
CD1a cortical thymocytes Langerhans cells
CD2 thymic, T-cells, NK cell
CD3 pan T-cell antigen
CD4 helper T-cells
CD5 pan T-cells, B-cell subset, thymic carcinoma
CD7 pan T-cells, NK cells and thymocytes
CD8 suppressor T-cells
CD10 common acute lymphoblastic leukemia antigen
CD 15 epithelial, myeloid, Reed-Sternberg cell
CD20 pan B-cell
CD23 activated B-cells
CD30 Ki-1 activated T-cells, B-cells, Reed-Sternberg cell
CD31 endothelial cells technical only
CD34 endothelial, stem cells, stromal cells
CD43 T-cell, myeloid, B-cell subset, histiocytes
CD45 leucocyte common antigen
CD56 NK cell
CD57 neural, neuroendocrine, NK cells
CD68 macrophages
CD79a B-cells, plasma cells
CD138 plasma cells, subset epithelial cells
CDX2 colorectal carcinoma
Chromogranin A

c-kit, myeloid and mast cell (CD117)
Collagen IV, basement membrane protein
Cyclin D1/PRAD1, mantle cell lymphoma
Cytokeratin 5/6, squamous, mesothelial
Cytokeratin 5 / p63 tumor suppressor gene cocktail
Cytokeratin 5, p63, CK8/18 breast cocktail
Cytokeratin 7, 54kD
Cytokeratin 8, 35BH11
Cytokeratin 8 (CAM5.2)
Cytokeratin 8/18, adenocarcinoma
Cytokeratin 19
Cytokeratin 20
Cytokeratin cocktail, PAN (AE1/AE3)
Cytokeratin high molecular weight, 34BE12
Cytomegalovirus
D2-40, Podoplanin
Desmin filament protein
DOG1, derived from GIST 1
E-cadherin epithelial cell, ductal-type breast carcinoma
EGFR, epidermal growth factor receptor (HER1)
Epithelial membrane antigen
Epithelial related antigen (MOC-31)
ERCC1 excision repair cross complementing polypeptide
Estrogen receptor
Factor XIIIa fibrohistiocytic, dendritic interstitial cells
Fascin, Hodgkin's lymphoma, Reed Sternberg cells
Galectin-3, thyroid neoplasm, anaplastic LCL
Gastrin, G-cell antral/pyloric mucosa
Glycophorin-A
Granzyme B, cytotoxic T-cell subset, NK cell
Gross cystic disease fluid protein 15
Hairy cell leukemia (DBA44)
Helicobacter pylori
Hepatocyte antigen (HEP-Par-1)
HER2/neu IVD
Herpes Simplex virus type I and II
HHV8, human herpes virus type 8
HMB 45, melanoma associated marker
Human glial fibrillary acidic protein
Inhibin, adrenal cortical, sex chord stromal
Ki67 (MIB-1) cell proliferation marker
Melanoma associated marker/Mart 1
Melanoma cocktail (HMB-45, Melan A)
Microsatellite instability MLH1
Microsatellite instability MSH2
Microsatellite instability MSH6
MSI profile (MLH1, MSH2, MSH6, PMS2)
MUM1, multiple myeloma oncogene 1
Muscle specific actin
Myeloperoxidase
Myogenin muscle marker, rhabdomyosarcoma

Myoglobin cardiac, skeletal
Neurofilament
Neuron-specific enolase (NSE)
p16 tumor suppressor protein
p21 WAF1, inhibitory gene
p27Kip, kinase inhibitory protein 1
p53 tumor suppressor gene protein
p63 nuclear, tumor suppressor gene protein
p63 plasma cell, tumor suppressor gene protein
P504S gene product (AMACR) prostatic adenocarcinoma
PAX-5, B-cell transcription factor
pERK1/2, extracellular signal related kinase
PIN-2 cocktail (P504S, CK HMW), prostatic intraepithelial neoplasia
PIN-4 cocktail (P504S, HMW CK, p63)
Placental alkaline phosphatase, germ cell tumors, adenocarcinoma
Platelet derived growth factor receptor (PDGFR) alpha
Post meiotic segregation increased 2
pRb, phosphorylated retinoblastoma suppressor protein
ProEx™ C biomarker
Progesterone receptor
Prostate specific antigen (PSA)
Prostatic acid phosphatase
RalA
RalB
RhoA
RhoC
Renal cell carcinoma
S-100 protein
Smooth muscle actin
Smooth muscle myosin
Somatostatin, D-cells pancreatic islet cells
Synaptophysin
Survivin
TAG 72, adenocarcinoma
Terminal deoxynucleotidyl transferase, cortical thymocytes
Thyroglobulin
Thyroid Transcription Factor-1
Tyrosinase
Varicella zoster virus
Vimentin
Von Willebrand Factor VIII
WT1, Wilms tumor
ZAP 70, CLL/SLL prognosis