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CD44 Antibody (clone MEM-85)

Mouse Monoclonal Antibody
Catalog # ALS12664

Specification

CD44 Antibody (clone MEM-85) - Product Information

Application	**IHC**
Primary Accession	P16070
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**82kDa KDa**

CD44 Antibody (clone MEM-85) - Additional Information

Gene ID 960

Other Names
CD44 antigen, CDw44, Epican, Extracellular matrix receptor III, ECMR-III, GP90 lymphocyte homing/adhesion receptor, HUTCH-I, Heparan sulfate proteoglycan, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1, Phagocytic glycoprotein I, PGP-I, CD44, CD44, LHR, MDU2, MDU3, MIC4

Target/Specificity
Reacts with both cell surface-expressed and soluble form of CD44 antigen (Phagocyte glycoprotein 1), a 80-95 kD transmembrane glycoprotein (hyaladherin family) present on the most of cells and tissues (leukocytes, endothelial cells, mesenchymal cells ...

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
CD44 Antibody (clone MEM-85) is for research use only and not for use in diagnostic or therapeutic procedures.

CD44 Antibody (clone MEM-85) - Protein Information

Name CD44

Synonyms LHR, MDU2, MDU3, MIC4

Function
Cell-surface receptor that plays a role in cell-cell interactions, cell adhesion and migration, helping them to sense and respond to changes in the tissue microenvironment (PubMed:16541107, PubMed:19703720, PubMed:22726066). Participates thereby in a wide variety of cellular functions including the activation, recirculation and homing of

T-lymphocytes, hematopoiesis, inflammation and response to bacterial infection (PubMed:7528188). Engages, through its ectodomain, extracellular matrix components such as hyaluronan/HA, collagen, growth factors, cytokines or proteases and serves as a platform for signal transduction by assembling, via its cytoplasmic domain, protein complexes containing receptor kinases and membrane proteases (PubMed:18757307, PubMed:23589287). Such effectors include PKN2, the RhoGTPases RAC1 and RHOA, Rho-kinases and phospholipase C that coordinate signaling pathways promoting calcium mobilization and actin-mediated cytoskeleton reorganization essential for cell migration and adhesion (PubMed:15123640).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus {ECO:0000250|UniProtKB:P15379}. Secreted Note=Colocalizes with actin in membrane protrusions at wounding edges Co-localizes with RDX, EZR and MSN in microvilli. Localizes to cholesterol-rich membrane-bound lipid raft domains {ECO:0000250|UniProtKB:P15379, ECO:0000269|PubMed:23589287}

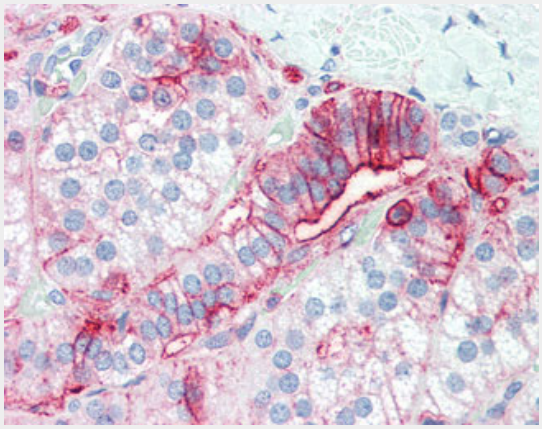
Tissue Location
Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells

CD44 Antibody (clone MEM-85) - Protocols

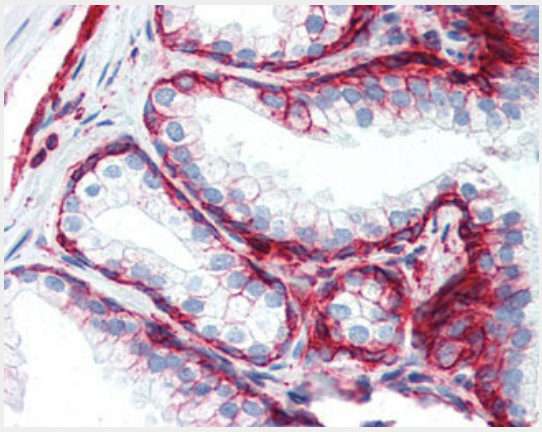
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

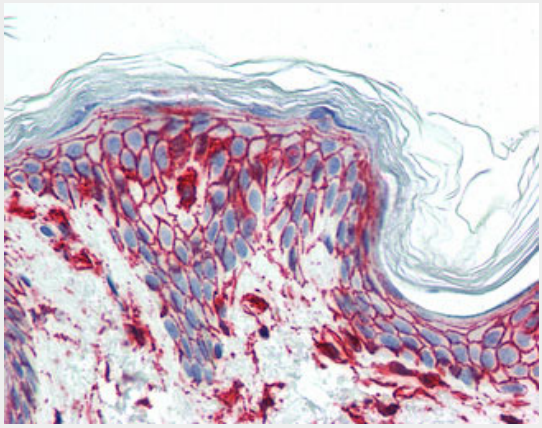
CD44 Antibody (clone MEM-85) - Images



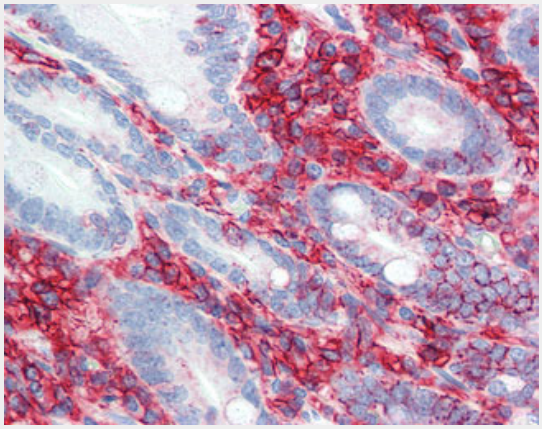
Anti-CD44 antibody IHC of human adrenal.



Anti-CD44 antibody IHC of human prostate.



Anti-CD44 antibody IHC of human skin.



Anti-CD44 antibody IHC of human small intestine.

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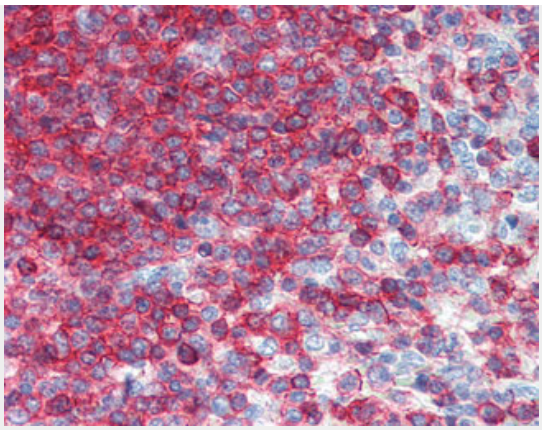
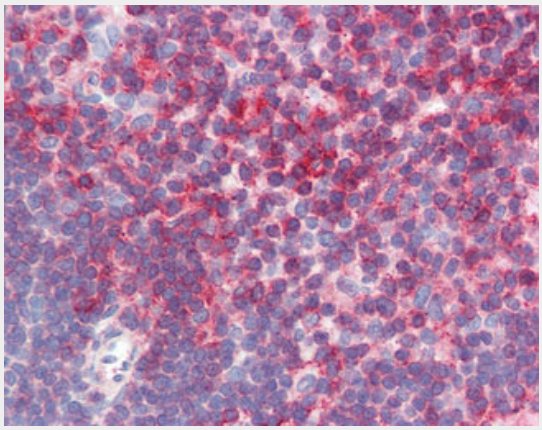


Anti-CD44 antibody IHC of human spleen.



Anti-CD44 antibody IHC of human thymus.

CD44 Antibody (clone MEM-85) - Background

Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. In cancer cells, may play an important role in invadopodia formation. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.

CD44 Antibody (clone MEM-85) - References

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Harn H.-J.,et al.Biochem. Biophys. Res. Commun. 178:1127-1134(1991).
Stamenkovic I.,et al.EMBO J. 10:343-348(1991).
Dougherty G.J.,et al.J. Exp. Med. 174:1-5(1991).
Kugelman L.C.,et al.J. Invest. Dermatol. 99:886-891(1992).