

**CD44 Antibody (FITC)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14289****Specification**

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**CD44 Antibody (FITC) - Product Information**

Application	IHC
Primary Accession	<a href="#">P16070</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	82kDa KDa

**CD44 Antibody (FITC) - 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**

Recognizes the human CD44 cell surface antigen, a 100kD glycoprotein widely expressed on human leucocytes, white matter of the brain and by some epithelial cells of the intestine and of the breast. CD44 expression may be up-regulated upon some carcin ...

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze-thaw cycles and prolonged exposure to light.

**Precautions**

CD44 Antibody (FITC) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD44 Antibody (FITC) - 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:<a href="http://www.uniprot.org/citations/16541107" target="\_blank">16541107</a>, PubMed:<a href="http://www.uniprot.org/citations/19703720" target="\_blank">19703720</a>, PubMed:<a href="http://www.uniprot.org/citations/22726066" target="\_blank">22726066</a>). 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:<a href="http://www.uniprot.org/citations/7528188" target="\_blank">7528188</a>). 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:<a href="http://www.uniprot.org/citations/18757307" target="\_blank">18757307</a>, PubMed:<a href="http://www.uniprot.org/citations/23589287" target="\_blank">23589287</a>). 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:<a href="http://www.uniprot.org/citations/15123640" target="\_blank">15123640</a>).

#### 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

#### Volume

50 µl

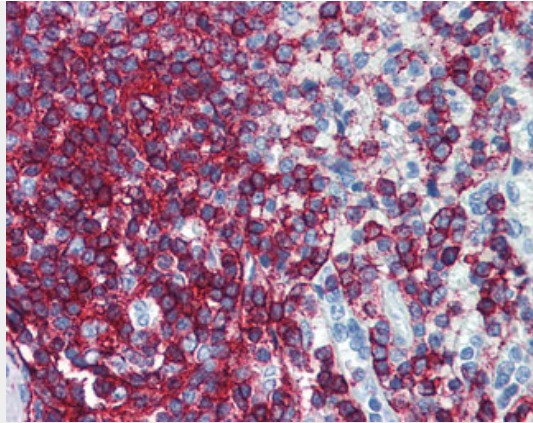
#### CD44 Antibody (FITC) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CD44 Antibody (FITC) - Images





Anti-CD44 antibody IHC of human spleen.

#### **CD44 Antibody (FITC) - 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 (FITC) - References**

- Stamenkovic I.,et al.Cell 56:1057-1062(1989).
- 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).