

CD44 Antibody

Rabbit mAb Catalog # AP92837

Specification

CD44 Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names WB, IHC, FC, ICC, IP <u>P16070</u> Rat Monoclonal

LHR; CD44; CD44 antigen; CDw44; chondroitin sulfate proteoglycan 8; CSPG8; Epican; HCELL; hematopoietic cell E- and L-selectin ligand; Heparan sulfate proteoglycan; Hermes antigen; HSA; HUTCH1; HUTCHI; Hyaluronate receptor; MDU2; MDU3; MIC4; MUTCH1; PGP1; Phagocytic glycoprotein 1; Soluble CD44;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	81538 Da

CD44 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50
	ICC~~N/A IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CD44
Description	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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

CD44 Antibody - 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

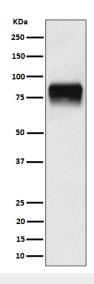
CD44 Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD44 Antibody - Images





Western blot analysis of CD44 expression in U-87 MG cell lysate.