

CD44 Antibody

Rabbit mAb Catalog # AP92837

Product Information

Application WB, IHC, IF, FC, ICC, IP, IHF

Primary Accession P16070

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names 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;

IsotypeRabbit IgGHostRabbitCalculated MW81538

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50

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.

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: <u>22726066</u>). 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:<u>18757307</u>, PubMed:<u>23589287</u>). 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:<u>15123640</u>).

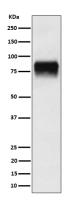
Cellular Location

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

Images



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

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