

# CD44 Antibody

Rabbit mAb Catalog # AP92837

## **Product Information**

Application Primary Accession Reactivity Clonality Other Names	WB, IHC, IF, FC, ICC, IP, IHF <u>P16070</u> Rat, Human, Mouse 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;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	81538

#### **Additional Information**

Dilution Purification Immunogen	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50 Affinity-chromatography 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: <u>16541107</u> , PubMed: <u>19703720</u> , 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: <u>7528188</u> ). 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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