

Anti-human CD44 antibody
Purified Mouse Monoclonal Antibody
Catalog # ABV11684**Specification**

Anti-human CD44 antibody - Product Information

Application	WB, E
Primary Accession	P16070
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Calculated MW	81538

Anti-human CD44 antibody - 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

CD44 (unconjugated)

Formulation

1 mg/ml in phosphate buffered saline (PBS) with sodium azide (15 mM), Approx. pH: 7.4.

Handling

The antibody solution should be gently mixed before use

Background Descriptions**Precautions**

Anti-human CD44 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-human 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

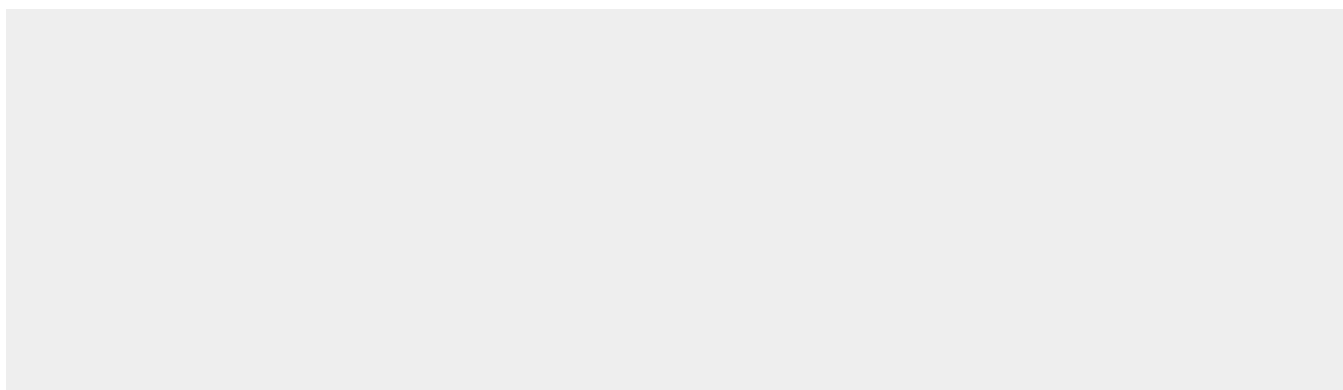
Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma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

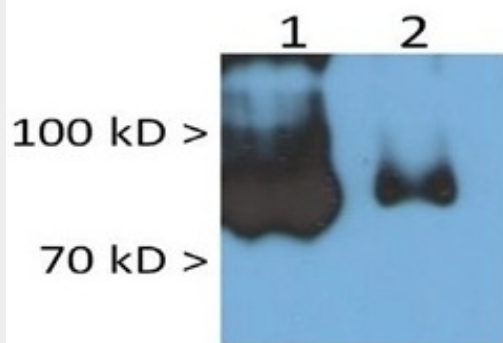
Anti-human CD44 antibody - Protocols

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

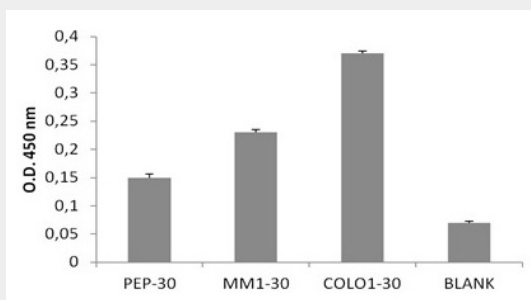
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-human CD44 antibody - Images





Detection of CD44 by Western blotting. 1.MM1 lysate(20ug). 2.Purified exosomes from humn plasma healthy donors(20ug).



PEP-30: 30ug of purified exosomes from human healthy donor's plasma. MM1-30: 30ug of purified exosomes from MM1 cell supernatant. COLO1-30: 30ug of purified exosomes from COLO1 cell supernatant.

Anti-human CD44 antibody - Background

CD44, known also as HCAM, is a 742 amino acids protein involved in hematopoiesis, lymphocytes activation. CD44 is expressed in multiple isoforms. In particular, CD44 is highly expressed in cancer tissues and tumor-derived exosomes, suggesting a role in tumor progression and metastasis.