

Anti-CD44 Antibody

Catalog # AP95511

Product Information

Application	FC, IF/IC
Primary Accession	P16070
Reactivity	Human
Host	Mouse
Clonality	Monoclonal (clone: P2A1)
Calculated MW	81538

Additional Information

Gene ID	960
Other Names	LHR; MDU2; MDU3; MIC4; 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; CD antigen CD44
Target/Specificity	Native purified human CD44.
Dilution	FC~~FC (1/500 - 1/2000) IF/IC~~N/A
Format	Mouse IgG2a. Liquid in PBS, pH 7.3, and 0.02% sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

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](#)). Upon interaction with LGALS9 ligand, activates downstream signaling components including LCK, ERK and MAPK to promotes NK cell activation (PubMed:[37006235](#)).

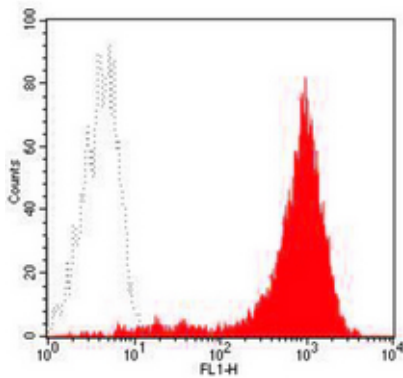
Cellular Location

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



Flow cytometric analysis of human peripheral blood lymphocytes using Anti-CD44 Antibody, followed by anti-mouse IgG PE.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.