

KD-Validated Anti-CD44 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1164

Product Information

Application	WB, FC, ICC
Primary Accession	P16070
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 3055
Calculated MW	81538
Gene Name	CD44
Aliases	CD44 Molecule (Indian Blood Group); HUTCH-I; HCELL; CSPG8; MC56; Pgp1; MDU2; MDU3; MIC4; IN; Hematopoietic Cell E- And L-Selectin Ligand; GP90 Lymphocyte Homing/Adhesion Receptor; Chondroitin Sulfate Proteoglycan 8; Extracellular Matrix Receptor III; Homing Cell Adhesion Molecule; Heparan Sulfate Proteoglycan; Phagocytic Glycoprotein 1; Phagocyte Glycoprotein 1; Hyaluronate Receptor; In(Lu) Related-P80; Hermes Antigen; CD44 Antigen; Hermes-1; ECMR-III; HUTCH-1; ECM-III; Epican; PGP-1; CD44R; CDw44; H-CAM; LHR; CD44 Antigen (Homing Function And Indian Blood Group System); Homing Function And Indian Blood Group System; Extracellular Matrix Receptor-III; Cell Surface Glycoprotein CD44; Indian Blood Group Antigen; Phagocytic Glycoprotein I; Soluble CD44; CDW44; PGP-I
Immunogen	A synthesized peptide derived from human CD44

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

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

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