

KD-Validated Anti-CD44 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1164**Specification**

KD-Validated Anti-CD44 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC, ICC
Primary Accession	P16070
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 82 kDa , observed, 81 kDa KDa
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

KD-Validated Anti-CD44 Rabbit Monoclonal 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

KD-Validated Anti-CD44 Rabbit Monoclonal 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}

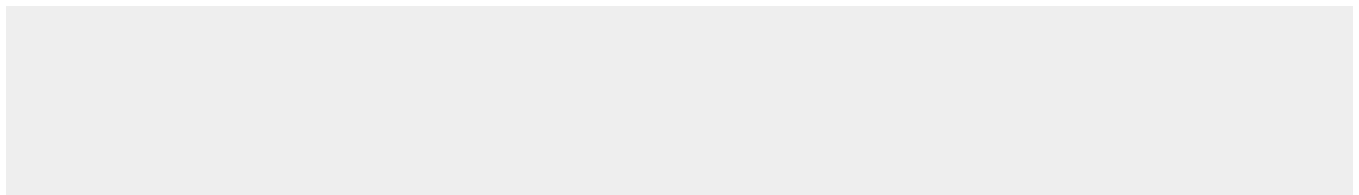
Tissue Location

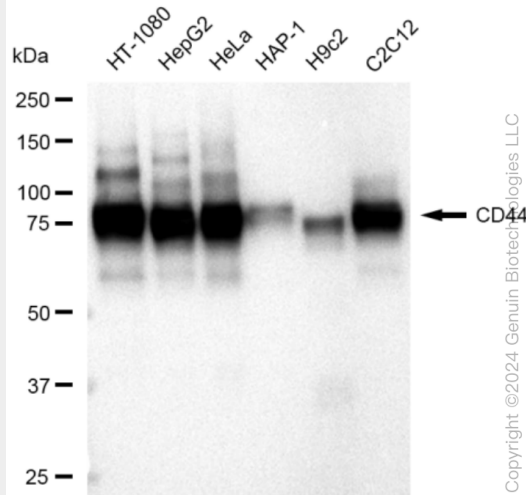
Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma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

KD-Validated Anti-CD44 Rabbit Monoclonal Antibody - Protocols

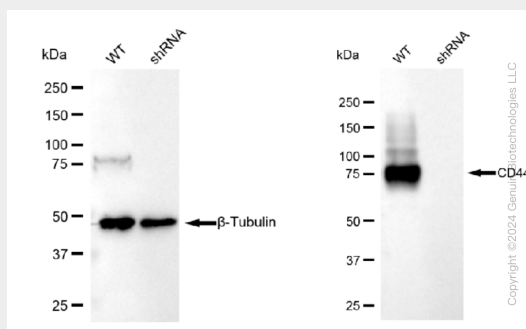
Provided below are standard protocols that you may find useful for product applications.

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

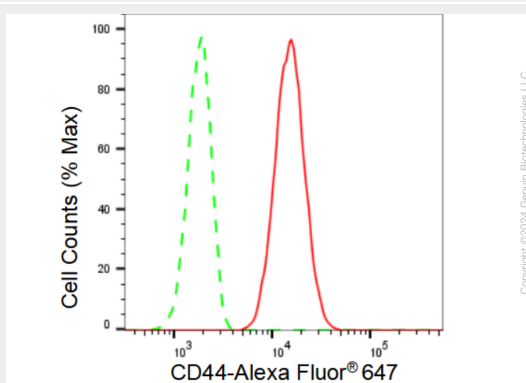
KD-Validated Anti-CD44 Rabbit Monoclonal Antibody - Images



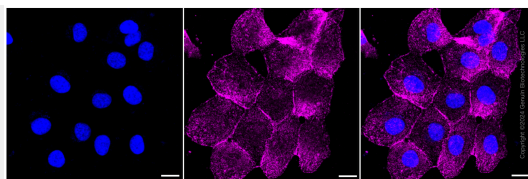
Western blotting analysis using anti-CD44 antibody (Cat#AGI1164). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CD44 antibody (Cat#AGI1164, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-CD44 antibody (Cat#AGI1164). CD44 expression in wild type (WT) and CD44 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-CD44 antibody (Cat#AGI1164, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of CD44 expression in HT-1080 cells using CD44 antibody (Cat#AGI1164, 1:2,000). Green, isotype control; red, CD44.



Immunocytochemical staining of HT-1080 cells with CD44 antibody (Cat#AGI1164, 1:1,000). Nuclei were stained blue with DAPI; CD44 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 μ m.