

Product Name: KD-Validated CD44 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01631**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 81.5kDa

Antigen Information

Gene Name	CD44 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
Alternative Names	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
Gene ID	960.0

SwissProt ID	P16070
Immunogen	A synthesized peptide derived from human CD44

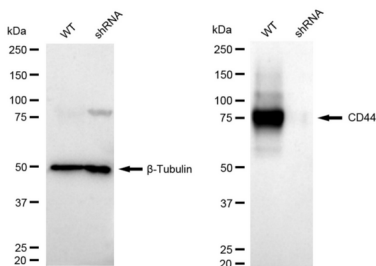
Background

The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis. [provided by RefSeq, Jul 2008]

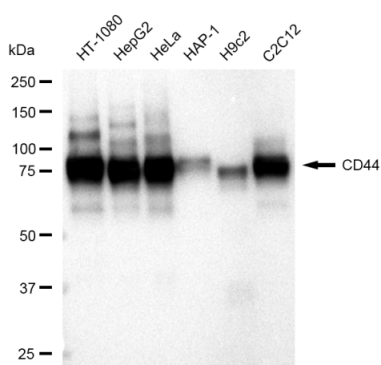
Research Area

Immunology, Stem Cells, Cancer, Kits/ Lysates/ Other

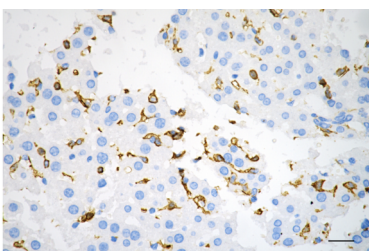
Image Data



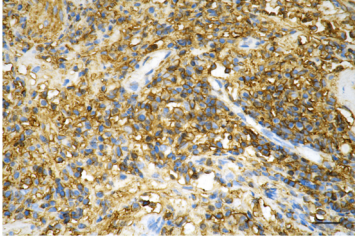
Western blotting analysis using CD44 antibody (KVA01631). CD44 expression in wild type (WT) and CD44 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with CD44 antibody (KVA01631, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



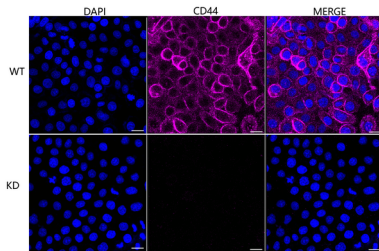
Western blotting analysis using CD44 antibody (KVA01631). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with CD44 antibody (KVA01631, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



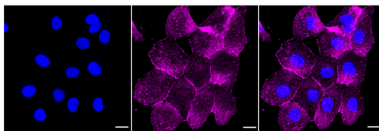
Immunohistochemistry was performed on paraffin-embedded mouse liver using CD44 antibody (KVA01631, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



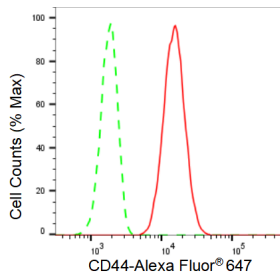
Immunohistochemistry was performed on paraffin-embedded human bladder carcinoma using CD44 antibody (KVA01631, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μ m.



Immunocytochemical staining of HeLa cells using CD44 antibody (KVA01631, 1:1,000). Top panel: wild-type (WT); Bottom panel: CD44 shRNA knockdown (KD). Nuclei were stained blue with DAPI; CD44 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.



Immunocytochemical staining of HT-1080 cells with CD44 antibody (KVA01631, 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.



Flow cytometric analysis of CD44 expression in HT-1080 cells using CD44 antibody (KVA01631, 1:2,000). Green, isotype control; red, CD44.