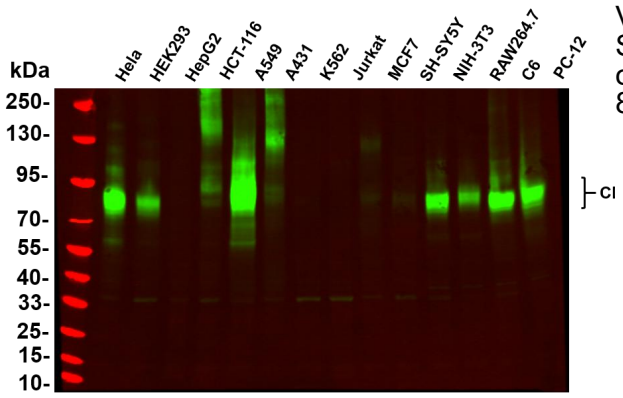
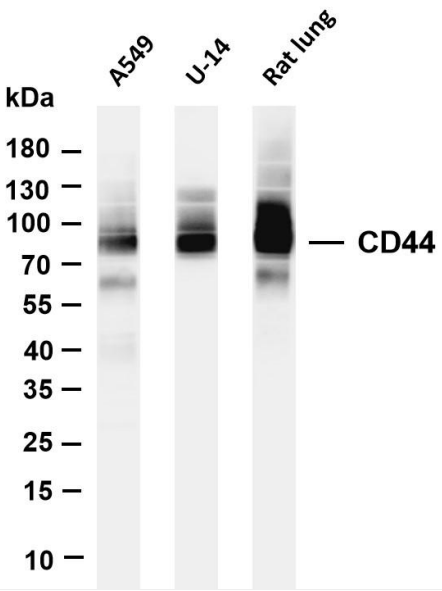
CD44 Rabbit mAb

Catalog No	YP-rAb-17903
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	CD44 LHR MDU2 MDU3 MIC4
Protein Name	CD44
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:20000-1:50000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	LHR antibody ; BA-1 antibody ; CD 44 antibody ; CD44 antibody ; CD44 antigen antibody ; CD44 molecule ; Indian blood group ; antibody ; CD44 molecule antibody ; CD44_HUMAN antibody ; CDw44 antibody ; CDW44 antigen antibody ; Cell surface glycoprotein CD44 antibody ; chondroitin sulfate proteoglycan 8 antibody ; CSPG8 antibody ; ECMR-III antibody ; Epican antibody ; Extracellular matrix receptor III antibody ; GP90 lymphocyte homing/adhesion receptor antibody ; HCELL antibody ; hematopoietic cell E- and L-selectin ligand antibody ; Heparan sulfate proteoglycan antibody ; Hermes antigen antibody ; homing function and Indian blood group system antibody ; HSA antibody ; HUTCH-I antibody ; HUTCH1 antibody ; HUTCHI antibody ; Hyaluronate receptor antibody ; IN antibody ; INLU-related p80 Glycoprotein antibody ; MC56 antibody ; MDU2 antibody ; MDU3 antibody ; MGC10468 antibody ; MIC4 antibody ; MUTCH I antibody ; MUTCH1 antibody ; PGP-1 antibody ; PGP-I antibody ; PGP1 antibody ; Phagocytic glycoprotein 1 antibody ; Phagocytic glycoprotein I antibody ; Soluble CD44 antibody ;
Observed Band	81kD

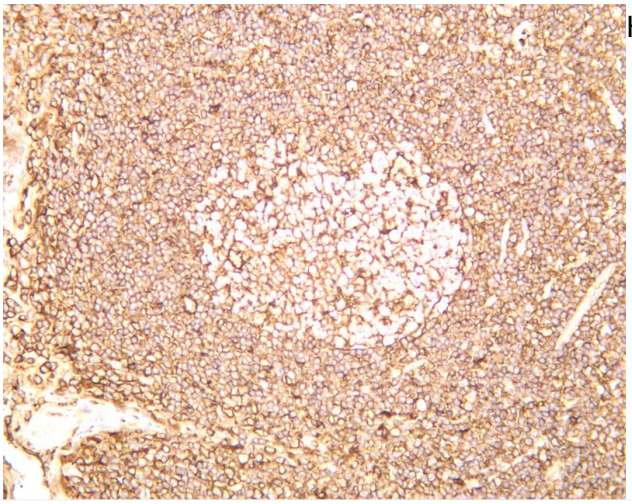
Calculated Molecular Weight	81kD
Cell Pathway	Membrane
Tissue Specificity	Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.
Function	Alternative products:Additional isoforms seem to exist. Additional isoforms are produced by alternative splicing of 10 out of 19 exons within the extracellular domain. Additional diversity is generated through the utilization of internal splice donor and acceptor sites within 2 of the exons. A variation in the cytoplasmic domain was shown to result from the alternative splicing of 2 exons. Isoform CD44 is expected to be expressed in normal cells. Splice variants have been found in many tumor cell lines. Exons 5, 6, 7, 8, 9, 10, 11, 13, 14 and 19 are alternatively spliced. Experimental confirmation may be lacking for some isoforms,Function:Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events.,online information:Blood group antigen gene mutation database,online information:CD44 entry,polymorphism:CD44 is responsible for the Indian blood group system. The molecular basis of the In(A)=In1/In(B)=In2 blood group antigens is a single variation in position 46; In(B), the most frequent allele, has Arg-46.,PTM:N-glycosylated.,PTM:O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s).,PTM:Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.,PTM:Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors.,similarity:Contains 1 Link domain.,subunit:Interacts with HA, as well as other glycosaminoglycans, collagen, laminin, and fibronectin via its N-terminal segment. Interacts with ANK, the ERM proteins (VIL2, RDX and MSN), and NF2 via its C-terminal segment.,tissue specificity:An epithelial isoform (CD44E) is expressed by cells of epithelium and highly expressed by carcinomas. An hematopoietic isoform (CD44H) is expressed by cells of mesodermal origin. Expression is repressed in neuroblastoma cells.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



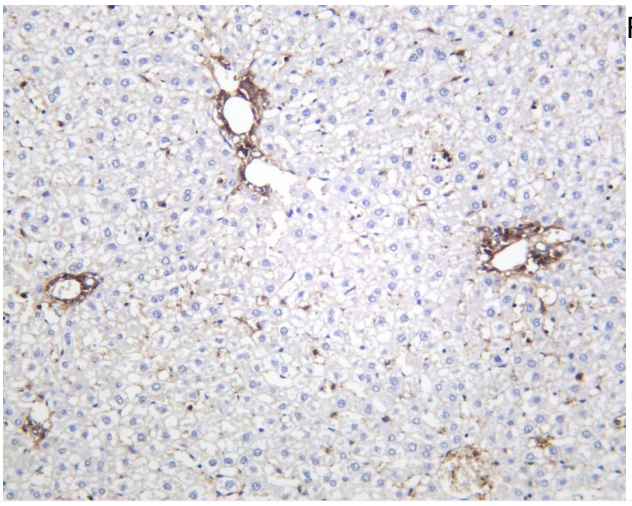
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



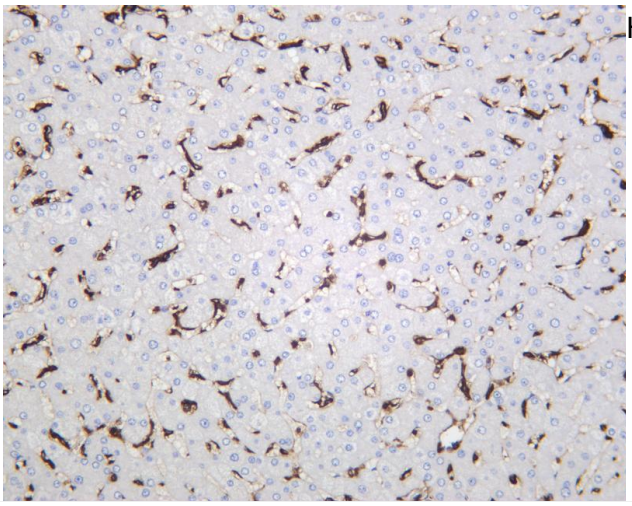
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CD44 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: U-14 Lane 3: Rat lung Predicted band size: 81kDa Observed band size: 81kDa



Human tonsil was stained with anti-CD44 rabbit antibody



Rat liver was stained with anti-CD44 rabbit antibody



Human liver was stained with anti-CD44 rabbit antibody