

# Rabbit Anti-CD44 antibody

# SL4916R

Product Name:	CD44
Chinese Name:	CD44抗体
Alias:	LHR; BA-1; CD 44; CD44; CD44 antigen; CD44 molecule; CD44_HUMAN; CDw44; Cell surface glycoprotein CD44; chondroitin sulfate proteoglycan 8; ECMR-III; Epican; Extracellular matrix receptor III; GP90 lymphocyte homing/adhesion receptor; hematopoietic cell E- and L-selectin ligand; Heparan sulfate proteoglycan; Hermes antigen; homing function and Indian blood group system; HSA; HUTCH-I; HUTCH1; Hyaluronate receptor; MDU2; MDU3; MIC4; MUTCH1; PGP-1; PGP1; Phagocytic glycoprotein 1; Phagocytic glycoprotein I; CD44 antigen isoform 1 precursor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	85kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD44/HCAM/PGP1:231-330/778 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>

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].

#### **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.

#### **Subunit:**

#### Product Detail:

Interacts with PKN2. 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.

#### **Subcellular Location:**

Membrane; Single-pass type I membrane protein. Note=Colocalizes with actin in membrane protrusions at wounding edges.

### Tissue Specificity:

Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.

#### Post-translational modifications:

Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors.

N- and O-glycosylated. O-glycosylation contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s). It is uncertain if O-glycosylation occurs on Thr-637 or Thr-638. Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.

#### Similarity:

Contains 1 Link domain.

**SWISS:** 

P16070

Gene ID:

960

Database links:

Entrez Gene: 281057Cow

Entrez Gene: 960Human

Entrez Gene: 12505 Mouse

iotech.com Entrez Gene: 100301546Rabbit

Entrez Gene: 25406Rat

Omim: 107269Human

SwissProt: Q29423Cow

SwissProt: P16070Human

SwissProt: P15379Mouse

SwissProt: P26051Rat

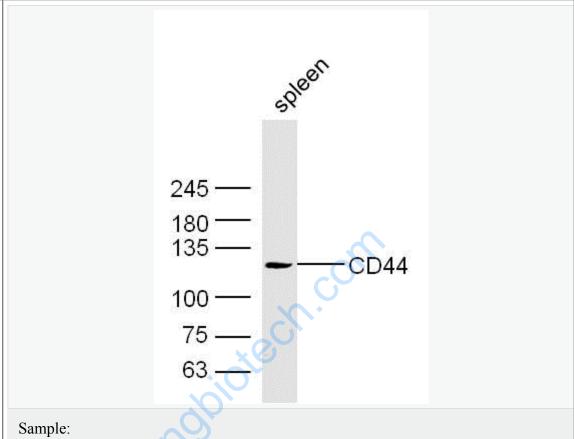
Unigene: 502328Human

Unigene: 423621 Mouse

Unigene: 1120Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

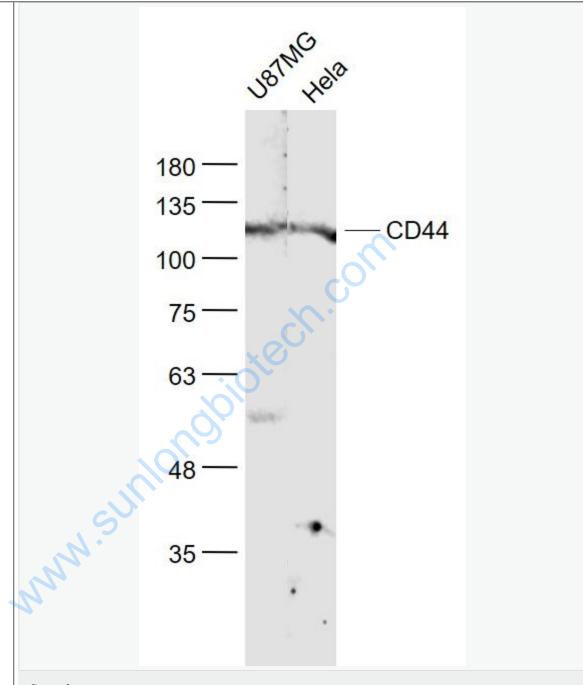
Spleen(Mouse) Lysate at 40 ug

Primary: Anti- CD44 (SL4916R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 85 kD

Observed band size: 120 kD



Sample:

U87mg(Human) Cell Lysate at 30 ug

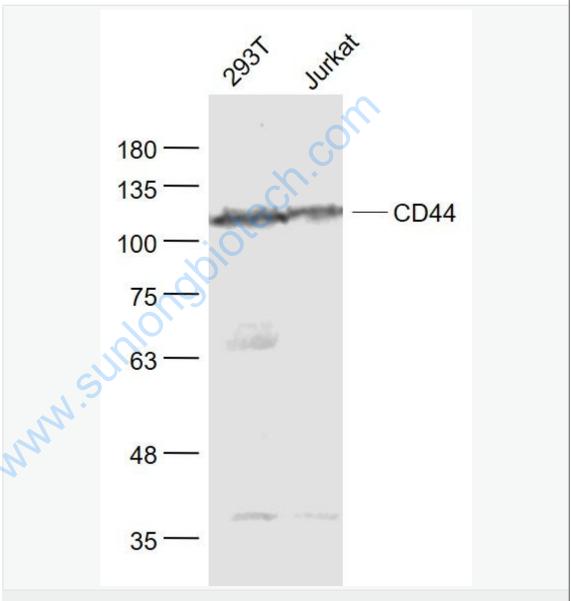
Hela(Human) Cell Lysate at 30 ug

Primary: Anti- CD44 (SL4916R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 85 kD

Observed band size: 120 kD



Sample:

293T(Human) Cell Lysate at 30 ug

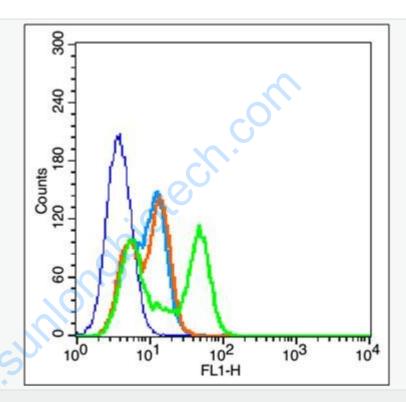
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti- CD44 (SL4916R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 85 kD

Observed band size: 115 kD



Blank control(blue):A549 (fixed with 2% paraformaldehyde for 10 min at 37°C).

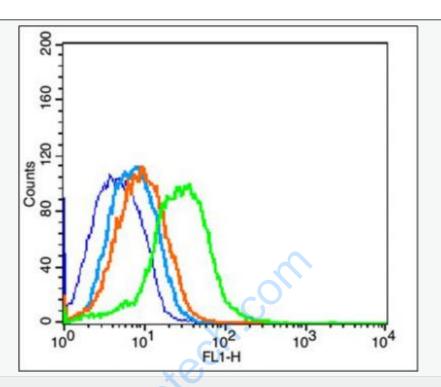
Primary Antibody:Rabbit Anti-CD44 antibody (SL4916R); Dilution: 1μg in 100 μL

1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions;

Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X

PBS containing 0.5% BSA.



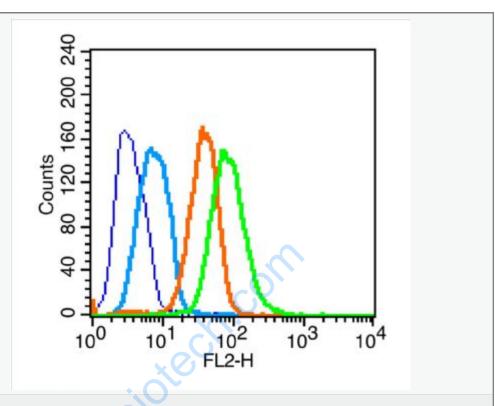
Blank control(blue): Mouse spleen (fixed with 2% paraformaldehyde for 10 min at 37°C).

Primary Antibody:Rabbit Anti-CD44 antibody (SL4916R); Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions;

Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X

PBS containing 0.5% BSA.



Blank control (blue line): U251 (fixed with 70% ethanol overnight at 4°C and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature).

Primary Antibody (green line): Rabbit Anti-CD44 antibody (SL4916R), Dilution:  $1\mu g \ /10^6 \ cells;$ 

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.