

**Anti-CD44 Picoband Antibody**  
Catalog # ABO12024

**Specification**

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**Anti-CD44 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P16070</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for CD44 antigen(CD44) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CD44 Picoband 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

**Calculated MW**

81538 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cell membrane; Single-pass type I membrane protein. 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.

**Protein Name**

CD44 antigen

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human CD44(29-56aa RFAGV~~F~~HVEKNGRYSISRTEAADLCKAF), different from the related mouse and rat sequences by two amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**

Contains 1 Link domain.

**Anti-CD44 Picoband 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:<a href="http://www.uniprot.org/citations/16541107" target="\_blank">16541107</a>, PubMed:<a href="http://www.uniprot.org/citations/19703720" target="\_blank">19703720</a>, PubMed:<a href="http://www.uniprot.org/citations/22726066" target="\_blank">22726066</a>). 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:<a href="http://www.uniprot.org/citations/7528188" target="\_blank">7528188</a>). 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:<a href="http://www.uniprot.org/citations/18757307" target="\_blank">18757307</a>, PubMed:<a href="http://www.uniprot.org/citations/23589287" target="\_blank">23589287</a>). 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:<a href="http://www.uniprot.org/citations/15123640" target="\_blank">15123640</a>).

**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.

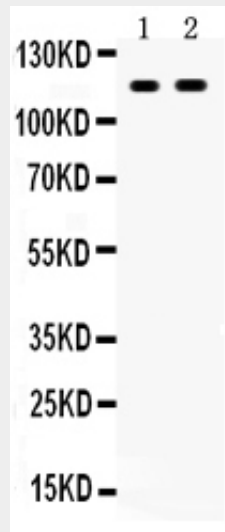
Expression is repressed in neuroblastoma cells

### Anti-CD44 Picoband Antibody - Protocols

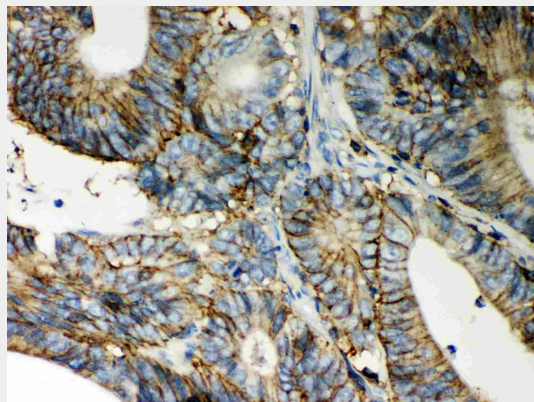
Provided below are standard protocols that you may find useful for product applications.

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

### Anti-CD44 Picoband Antibody - Images



Anti- CD44 Picoband antibody, ABO12024, Western blotting All lanes: Anti CD44 (ABO12024) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: PANC Whole Cell Lysate at 40ug Predicted bind size: 82KD Observed bind size: 115KD



Anti- CD44 Picoband antibody, ABO12024, IHC(P) IHC(P): Human Intestinal Cancer Tissue

### Anti-CD44 Picoband Antibody - Background

CD44 is also known as LHR or MC56. 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.