

**CD44 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12156b****Specification**

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**CD44 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [P16070](#)**CD44 Antibody (C-term) Blocking peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CD44 Antibody (C-term) Blocking peptide - 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

### **CD44 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **CD44 Antibody (C-term) Blocking peptide - Images**

### **CD44 Antibody (C-term) Blocking peptide - 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.

### **CD44 Antibody (C-term) Blocking peptide - References**

da Cunha, C.B., et al. Lab. Invest. 90(11):1604-1614(2010) Somasunderam, A., et al. Biochemistry 49(42):9106-9112(2010) Wolny, P.M., et al. J. Biol. Chem. 285(39):30170-30180(2010) Ryckman, K.K., et al. PLoS ONE 5 (8), E12273 (2010) :Scartozzi, M., et al. Anal. Quant. Cytol. Histol. 31(6):417-423(2009)