

CD44 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP20764c**Specification****CD44 Blocking Peptide (C-term) - Product Information**Primary Accession [P16070](#)**CD44 Blocking Peptide (C-term) - 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

Target/Specificity

The synthetic peptide sequence is selected from aa 688-702 of HUMAN CD44

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 Blocking Peptide (C-term) - Protein Information**Name** CD44**Synonyms** LHR, MDU2, MDU3, MIC4**CD44 Blocking Peptide (C-term) - Background**

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. In cancer cells, may play an important role in invadopodia formation. 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.

CD44 Blocking Peptide (C-term) - References

Stamenkovic I., et al. Cell 56:1057-1062(1989).
Harn H.-J., et al. Biochem. Biophys. Res. Commun. 178:1127-1134(1991).
Stamenkovic I., et al. EMBO J. 10:343-348(1991).
Dougherty G.J., et al. J. Exp. Med. 174:1-5(1991).
Kugelman L.C., et al. J. Invest. Dermatol. 99:886-891(1992).

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:16541107, PubMed:19703720, PubMed:22726066).

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:7528188). 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:18757307, PubMed:23589287). 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:15123640).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus
{ECO:0000250|UniProtKB:P15379}.
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

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

**CD44 Blocking Peptide (C-term) -
Protocols**

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

- [Blocking Peptides](#)