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JAM2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14209a

Specification

JAM2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P57087

JAM2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 58494

Other Names
Junctional adhesion molecule B, JAM-B, Junctional adhesion molecule 2, JAM-2, Vascular endothelial junction-associated molecule, VE-JAM, CD322, JAM2, C21orf43, VEJAM

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.

JAM2 Antibody (N-term) Blocking Peptide - Protein Information

Name JAM2 (HGNC:14686)

Function
Junctional adhesion protein that mediates heterotypic cell- cell interactions with its cognate receptor JAM3 to regulate different cellular processes (PubMed:11590146, PubMed:11823489, PubMed:24357068). Plays a role in homing and mobilization of hematopoietic stem and progenitor cells within the bone marrow (PubMed:24357068). At the surface of bone marrow stromal cells, it contributes to the retention of the hematopoietic stem and progenitor cells expressing JAM3 (PubMed:11590146, PubMed:24357068). Plays a central role in leukocytes extravasation by facilitating not only transmigration but also tethering and rolling of leukocytes along the endothelium (PubMed:12239159). Tethering and rolling of leukocytes are dependent on the binding by JAM2 of the integrin alpha-4/beta-1 (PubMed:12070135). Plays a role in spermatogenesis where JAM2 and JAM3, which are respectively expressed by Sertoli

and germ cells, mediate an interaction between both cell types and play an essential role in the anchorage of germ cells onto Sertoli cells and the assembly of cell polarity complexes during spermatid differentiation (By similarity). Also functions as an inhibitory somatodendritic cue that prevents the myelination of non-axonal parts of neurons (By similarity). During myogenesis, it is involved in myocyte fusion (By similarity). May also play a role in angiogenesis (By similarity).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell junction. Cell junction, tight junction {ECO:0000250|UniProtKB:Q9JI59}. Note=Localized at tight junctions of both epithelial and endothelial cells (By similarity). Specifically localized within the somatodendritic compartment of neurons and excluded from the axon (By similarity) {ECO:0000250|UniProtKB:Q9JI59}

Tissue Location
Highly expressed in heart, placenta, lung, foreskin and lymph node (PubMed:10779521, PubMed:10945976). Prominently expressed on high endothelial venules and also present on the endothelia of other vessels (at protein level) (PubMed:10779521, PubMed:10945976). Also expressed in the brain in the caudate nuclei (PubMed:31851307).

JAM2 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

JAM2 Antibody (N-term) Blocking Peptide - Images

JAM2 Antibody (N-term) Blocking Peptide - Background

Tight junctions represent one mode of cell-to-celladhesion in epithelial or endothelial cell sheets, formingcontinuous seals around cells and serving as a physical barrier toprevent solutes and water from passing freely through theparacellular space. The protein encoded by this immunoglobulinsuperfamily gene member is localized in the tight junctions betweenhigh endothelial cells. It acts as an adhesive ligand forinteracting with a variety of immune cell types and may play a rolein lymphocyte homing to secondary lymphoid organs. [provided byRefSeq].

JAM2 Antibody (N-term) Blocking Peptide - References

Need, A.C., et al. Hum. Mol. Genet. 18(23):4650-4661(2009)Ueki, T., et al. Microvasc. Res. 75(2):269-278(2008)Weber, C., et al. Nat. Rev. Immunol. 7(6):467-477(2007)Liu, T., et al. J. Proteome Res. 4(6):2070-2080(2005)Zhang, Z., et al. Protein Sci. 13(10):2819-2824(2004)