

# JAM3 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20552b

## **Specification**

# JAM3 Blocking Peptide (C-term) - Product Information

**Primary Accession** 

**Q9BX67** 

## JAM3 Blocking Peptide (C-term) - Additional Information

**Gene ID 83700** 

#### **Other Names**

Junctional adhesion molecule C, JAM-C, JAM-2, Junctional adhesion molecule 3, JAM-3, JAM3

## Target/Specificity

The synthetic peptide sequence is selected from aa 281-295 of HUMAN JAM3

#### **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.

## JAM3 Blocking Peptide (C-term) - Protein Information

# Name JAM3

### **Function**

Junctional adhesion protein that mediates heterotypic cell- cell interactions with its cognate receptor JAM2 to regulate different cellular processes (PubMed:<a

href="http://www.uniprot.org/citations/11590146" target="\_blank">11590146</a>, PubMed:<a href="http://www.uniprot.org/citations/11823489" target="\_blank">11823489</a>). Plays a role in homing and mobilization of hematopoietic stem and progenitor cells within the bone marrow. At the surface of bone marrow stromal cells, it contributes to the retention of the hematopoietic stem and progenitor cells expressing JAM3 (PubMed:<a

href="http://www.uniprot.org/citations/11590146" target="\_blank">11590146</a>, PubMed:<a href="http://www.uniprot.org/citations/24357068" target="\_blank">24357068</a>). Plays a central role in leukocytes extravasation by facilitating transmigration through the endothelium (By similarity). 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 a counter- receptor for ITGAM, mediating leukocyte-platelet interactions and is involved in the regulation of transepithelial



migration of polymorphonuclear neutrophils (PMN) (PubMed:<a href="http://www.uniprot.org/citations/12208882" target="\_blank">12208882</a>, PubMed:<a href="http://www.uniprot.org/citations/15194813" target="\_blank">15194813</a>). Plays a role in angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/23255084" target="\_blank">23255084</a>). Plays a role in the regulation of cell migration (Probable). During myogenesis, it is involved in myocyte fusion (By similarity).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cell junction. Cell junction, desmosome. Cell junction, tight junction. Note=Detected in the acrosome region in developing spermatids (By similarity). In epithelial cells, it is expressed at desmosomes but not at tight junctions (PubMed:15194813) Localizes at the cell surface of endothelial cells; treatment of endothelial cells with vascular endothelial growth factor stimulates recruitment of JAM3 to cell-cell contacts (PubMed:15994945) {ECO:0000250|UniProtKB:Q9D8B7}

#### **Tissue Location**

Detected on round and elongated spermatids (at protein level) (PubMed:15372036). Highest expression in placenta, brain and kidney. Significant expression is detected on platelets. Expressed in intestinal mucosa cells. Expressed in the vascular endothelium Found in serum (at protein level). Also detected in the synovial fluid of patients with rheumatoid arthritis, psoriatic arthritis or ostearthritis (at protein level).

# JAM3 Blocking Peptide (C-term) - Protocols

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

### Blocking Peptides

JAM3 Blocking Peptide (C-term) - Images

## JAM3 Blocking Peptide (C-term) - Background

Participates in cell-cell adhesion. It is a counter- receptor for ITGAM, mediating leukocyte-platelet interactions and is involved in the regulation of transepithelial migration of polymorphonuclear neutrophils (PMN). The soluble form is a mediator of angiogenesis.

## JAM3 Blocking Peptide (C-term) - References

Arrate M.P., et al.J. Biol. Chem. 276:45826-45832(2001). Aurrand-Lions M.A., et al.Blood 98:3699-3707(2001). Santoso S., et al.J. Exp. Med. 196:679-691(2002). Phillips H.M., et al.Genomics 79:475-478(2002). Ota T., et al.Nat. Genet. 36:40-45(2004).