

JAM2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14209a

Specification

JAM2 Antibody (N-term) - Product Information

| Application Primary Accession | WB, IHC-P,E <u>P57087</u> |
|----------------------------------|------------------------------|
| Other Accession | NP_067042.1 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 33207 |
| Antigen Region | 63-91 |

JAM2 Antibody (N-term) - 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

Target/Specificity

This JAM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-91 amino acids from the N-terminal region of human JAM2.

Dilution WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

JAM2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

JAM2 Antibody (N-term) - Protein Information

Name JAM2 (<u>HGNC:14686</u>)



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

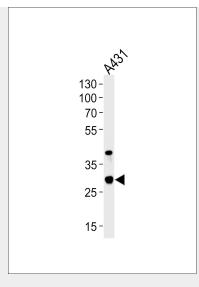
JAM2 Antibody (N-term) - Protocols

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

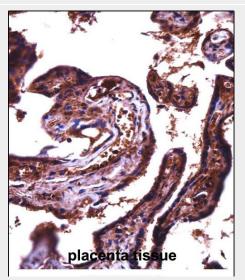
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

JAM2 Antibody (N-term) - Images





Western blot analysis of lysate from A431 cell line, using JAM2 Antibody (N-term)(Cat. #AP14209a). AP14209a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



JAM2 Antibody (N-term) (AP14209a)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of JAM2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

JAM2 Antibody (N-term) - Background

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. The protein encoded by this immunoglobulin superfamily gene member is localized in the tight junctions between high endothelial cells. It acts as an adhesive ligand for interacting with a variety of immune cell types and may play a role in lymphocyte homing to secondary lymphoid organs. [provided by RefSeq].

JAM2 Antibody (N-term) - 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)