10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

JAM2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14209a

Product Information

Application	IHC-P, WB, E
Primary Accession	P57087
Other Accession	NP_067042.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34118
Calculated MW	33207
Antigen Region	63-91

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	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
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.

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).

Background

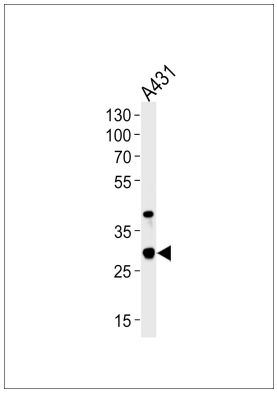
Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. The protein encoded by this immunoglobulin superfamily 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].

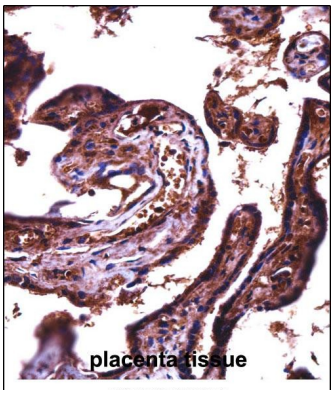
References

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)

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.