

Goat Anti-JAM2 / JAMB / CD322 Antibody

Peptide-affinity purified goat antibody Catalog # AF1576a

Specification

Goat Anti-JAM2 / JAMB / CD322 Antibody - Product Information

Application WB Primary Accession P57087

Other Accession NP 067042, 58494, 67374 (mouse), 619374

Reactivity Human

Predicted Mouse, Rat, Dog, Cow

Host Goat Clonality **Polyclonal** Concentration 100ug/200ul

Isotype laG Calculated MW 33207

Goat Anti-JAM2 / JAMB / CD322 Antibody - 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

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-JAM2 / JAMB / CD322 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-JAM2 / JAMB / CD322 Antibody - Protein Information

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

Function

Junctional adhesion protein that mediates heterotypic cell- cell interactions with its cognate receptor IAM3 to regulate different cellular processes (PubMed:11590146, PubMed:11823489, PubMed:<a



href="http://www.uniprot.org/citations/24357068" target="_blank">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).

Goat Anti-JAM2 / JAMB / CD322 Antibody - Protocols

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

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

Goat Anti-JAM2 / JAMB / CD322 Antibody - Im	ages
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AF1576a (0.5 μ g/ml) staining of Human Heart lysate (35 μ g protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-JAM2 / JAMB / CD322 Antibody - 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.

Goat Anti-JAM2 / JAMB / CD322 Antibody - References

A genome-wide study of common SNPs and CNVs in cognitive performance in the CANTAB. Need AC, et al. Hum Mol Genet, 2009 Dec 1. PMID 19734545.

Expression of junctional adhesion molecules on the human lymphatic endothelium. Ueki T, et al. Microvasc Res, 2008 Mar. PMID 17822725.

The role of junctional adhesion molecules in vascular inflammation. Weber C, et al. Nat Rev Immunol, 2007 Jun. PMID 17525755.

A distinct PAR complex associates physically with VE-cadherin in vertebrate endothelial cells. Iden S, et al. EMBO Rep, 2006 Dec. PMID 17057644.

The LIFEdb database in 2006. Mehrle A, et al. Nucleic Acids Res, 2006 Jan 1. PMID 16381901.