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JAMC Rabbit pAb

Catalog # AP97505

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9BX67
Other Accession	Q9BX67
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35020
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human JAMC
Epitope Specificity	31-130/310
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the immunoglobulin superfamily. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
SUBUNIT	Interacts with JAM2. Interacts with ITGAM.
Post-translational modifications	Proteolytically cleaved from endothelial cells surface into a soluble form by ADAM10 and ADAM17; the release of soluble JAM3 is increased by proinflammatory factors.
DISEASE	Defects in JAM3 are the cause of hemorrhagic destruction of the brain with subependymal calcification and cataracts (HDBSCC) [MIM:613730]. A syndrome characterized by congenital cataracts and severe brain abnormalities apparently resulting from hemorrhagic destruction of the brain tissue, including the cerebral white matter and basal ganglia. Patients manifest profound developmental delay, and other neurologic features included seizures, spasticity, and hyperreflexia. Brain imaging shows multifocal intraparenchymal hemorrhage with associated liquefaction and massive cystic degeneration, and calcification in the subependymal region and in brain tissue.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. Unlike other proteins in this family, the this protein is unable to adhere to leukocyte cell lines and only forms weak homotypic interactions. The encoded protein is a member of the junctional adhesion molecule protein family and acts as a receptor for another member of this family. A mutation in an intron of this gene is associated with hemorrhagic destruction of the brain, subependymal calcification, and congenital cataracts. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Apr 2011].

Additional Information

Gene ID	83700
Other Names	JAM-2; JAM-3; JAM-C; JAMC; 1110002N23Rik; Jcam3; JAM3_HUMAN; JAM3; Junctional adhesion molecule 3 (JAM-3); JAM3_MOUSE; JAM3_RAT; junctional adhesion molecule 3; junctional adhesion molecule C
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:11590146, PubMed:11823489). 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:11590146, PubMed:24357068). 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:12208882, PubMed:15194813). Plays a role in angiogenesis (PubMed:23255084). 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).

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