SANTA CRUZ BIOTECHNOLOGY, INC.

JAM-C (F-12): sc-23005

BACKGROUND

Junctional adhesion molecule (JAM) is a member of the immunoglobulin superfamily expressed in tight junctions of epithelial cells and endothelial cells. It is implicated in transendothelial migration of leukocytes. JAM is constitutively expressed on circulating monocytes, neutrophils, lymphocytes subsets and platelets. The JAM family consists of JAM-A, JAM-B and JAM-C, alternatively designated JAM-1, JAM-2 and JAM-3, respectively. JAM-A localizes with F-actin at the cell-cell contacts and at the membrane ruffles. It is involved in cell to cell adhesion through homophilic interactions and plays a role in the organization of tight junctions and modulation of leukocyte extravasation. JAM-B interacts with discrete subsets of PBLs, suggesting that it may play a role in lymphocyte trafficking. JAM-B and JAM-C proteins are binding partners; JAM-C may be a functional JAM-B receptor. Specifically, JAM-B adheres to T cells through heterotypic interactions with JAM-C. The JAM-B/JAM-C interaction my play a role in T, NK and dendritic cellular inflammation.

REFERENCES

1. Martin-Padura, I., et al. 1998. Junctional adhesion molecule, a novel member of the immunoglobulin superfamily that distributes at intercellular junctions and modulates monocyte transmigration. J. Cell Biol. 142: 117-127.
2. Ozaki, H., et al. 1999. Cutting edge: combined treatment of TNFα and IFN-γ causes redistribution of junctional adhesion molecule in human endothelial cells. J. Immunol. 163: 553-557.
3. Ozaki, H., et al. 2000. Junctional adhesion molecule (JAM) is phosphorylated by protein kinase C upon platelet activation. Biochem. Biophys. Res. Commun. 276: 873-878.
4. Ebnet, K., et al. 2000. Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1. J. Biol. Chem. 275: 27979-27988.
5. Dejana, E., et al. 2000. The molecular organization of endothelial junctions and their funcitonal role in vascular morphogenesis and permeability. Int. J. Dev. Biol. 44: 743-748.

CHROMOSOMAL LOCATION

Genetic locus: JAM3 (human) mapping to 11q25; Jam3 (mouse) mapping to 9 A4.

SOURCE

JAM-C (F-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JAM-C of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23005 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JAM-C (F-12) is recommended for detection of JAM-C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JAM-C (F-12) is also recommended for detection of JAM-C in additional species, including equine, canine and porcine.

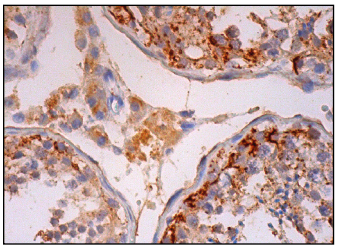
Suitable for use as control antibody for JAM-C siRNA (h): sc-43872, JAM-C siRNA (m): sc-77408, JAM-C shRNA Plasmid (h): sc-43872-SH, JAM-C shRNA Plasmid (m): sc-77408-SH, JAM-C shRNA (h) Lentiviral Particles: sc-43872-V and JAM-C shRNA (m) Lentiviral Particles: sc-77408-V.

Molecular Weight (predicted) of JAM-C: 35 kDa.

Molecular Weight (observed) of JAM-C: 38 kDa.

Molecular Weight of glycosylated JAM-C: 43-48 kDa.

DATA



JAM-C (F-12): sc-23005. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

SELECT PRODUCT CITATIONS

1. Wong, E.W., et al. 2008. Par3/Par6 polarity complex coordinates apical ectoplasmic specialization and blood-testis barrier restructuring during spermatogenesis. Proc. Natl. Acad. Sci. USA 105: 9657-9662.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.