SANTA CRUZ BIOTECHNOLOGY, INC.

JAM-A (H-80): sc-25629

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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, lymphocyte 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 may play a role in T, NK and dendritic cellular inflammation.

CHROMOSOMAL LOCATION

Genetic locus: F11R (human) mapping to 1q23.3; F11r (mouse) mapping to 1 H3.

SOURCE

JAM-A (H-80) is a rabbit polyclonal antibody raised against amino acids 220-299 mapping at the C-terminus of JAM-A 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.

STORAGE

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

APPLICATIONS

JAM-A (H-80) is recommended for detection of JAM-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for JAM-A siRNA (h): sc-43139, JAM-A siRNA (m): sc-43140, JAM-A shRNA Plasmid (h): sc-43139-SH, JAM-A shRNA Plasmid (m): sc-43140-SH, JAM-A shRNA (h) Lentiviral Particles: sc-43139-V and JAM-A shRNA (m) Lentiviral Particles: sc-43140-V.

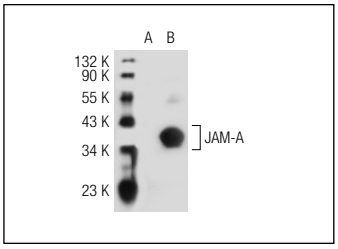
Molecular Weight of JAM-A: 36 kDa.

Positive Controls: JAM-A (m): 293T Lysate: sc-121150, T84 whole cell lysate: sc-364797 or human platelet extract: sc-363773.

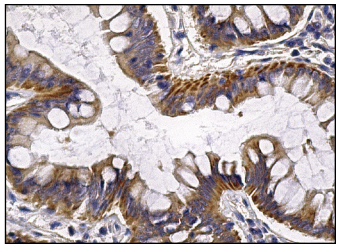
RESEARCH USE

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

DATA



JAM-A (H-80): sc-25629. Western blot analysis of JAM-A expression in non-transfected: sc-117752 (**A**) and mouse JAM-A transfected: sc-121150 (**B**) 293T whole cell lysates.



JAM-A (H-80): sc-25629. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic and membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Zheng, S., et al. 2007. Fiber-knob modifications enhance adenoviral tropism and gene transfer in malignant glioma. J. Gene Med. 9: 151-160.
2. Herman, R.E., et al. 2007. Phage display screening of epithelial cell monolayers treated with EGTA: identification of peptide FDFWITP that modulates tight junction activity. J. Biomol. Screen. 12: 1092-1101.
3. Puthenedam, M., et al. 2007. Modulation of tight junction barrier function by outer membrane proteins of enteropathogenic *Escherichia coli:* role of F-actin and junctional adhesion molecule-1. Cell Biol. Int. 31: 836-844.
4. van Houdt, W.J., et al. 2008. Transient infection of freshly isolated human colorectal tumor cells by reovirus T3D intermediate subviral particles. Cancer Gene Ther. 15: 284-292.
5. Lakshmi, S.P., et al. 2012. Effects of JAM-A deficiency or blocking antibodies on neutrophil migration and lung injury in a murine model of ALI. Am. J. Physiol. Lung Cell Mol. Physiol. 303: L758-L766.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.