



JAM-B (h3): 293T Lysate: sc-128899

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 may 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 TNF α 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 functional role in vascular morphogenesis and permeability. *Int. J. Dev. Biol.* 44: 743-748.
6. Bazzoni, G., et al. 2000. Homophilic interaction of junctional adhesion molecule. *J. Biol. Chem.* 275: 30970-30976.
7. Arrate, M.P., et al. 2001. Cloning of human junctional adhesion molecule 3 (JAM-3) and its identification as the JAM-2 counter-receptor. *J. Biol. Chem.* 276: 45826-45832.
8. Liang, T.W., et al. 2002. Vascular endothelial-junctional adhesion molecule (VE-JAM)/JAM-2 interacts with T, NK, and dendritic cells through JAM-3. *J. Immunol.* 168: 1618-1626.
9. Johnson-Leger, C.A., et al. 2002. Junctional adhesion molecule-2 (JAM-2) promotes lymphocyte transendothelial migration. *Blood* 100: 2479-2486.

CHROMOSOMAL LOCATION

Genetic locus: JAM2 (human) mapping to 21q21.2.

RESEARCH USE

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

PRODUCT

JAM-B (h3): 293T Lysate represents a lysate of human JAM-B transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

JAM-B (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive JAM-B antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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