



p-JAM-A (Ser 285): sc-17431

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.

REFERENCES

1. Martin-Padura, L., et al. 1998. Junctional adhesion molecule, a novel member of the immunoglobulin superfamily that distribution at intercellular junctions and modulates monocyte. *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. 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.
4. 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.
5. 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.
6. Bazzoni, G., et al. 2000. Homophilic interaction of junctional adhesion molecule. *J. Biol. Chem.* 275: 30970-30976.
7. Barton, E.S., et al. 2001. Junction adhesion molecule is a receptor for reovirus. *Cell* 104: 441-451.

CHROMOSOMAL LOCATION

Genetic locus: F11R (human) mapping to 1q21.2-q21.3; F11r (mouse) mapping to 1 H2.

SOURCE

p-JAM-A (Ser 285) is available as either goat (sc-17431) or rabbit (sc-17431-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing phosphorylated Ser 285 of JAM-A of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-17431 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-JAM-A (Ser 285) is recommended for detection of Ser 285 phosphorylated JAM-A of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 (m): sc-43140, JAM-A shRNA Plasmid (m): sc-43140-SH and JAM-A shRNA (m) Lentiviral Particles: sc-43140-V.

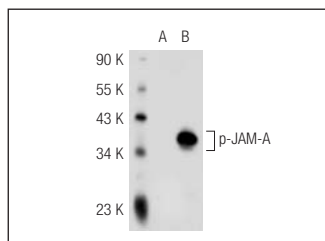
Molecular Weight of p-JAM-A: 32-35 kDa.

Positive Controls: JAM-A (m): 293T Lysate: sc-121150.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



p-JAM-A (Ser 285)-R: sc-17431-R. Western blot analysis of JAM-A phosphorylation in non-transfected: sc-117752 (A) and mouse JAM-A transfected: sc-121150 (B) 293T whole cell lysates.

RESEARCH USE

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