**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.

**SOURCE**

JAM-A (J3F.1) is a mouse monoclonal antibody raised against recombinant JAM fusion protein of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. JAM-A (J3F.1) is available conjugated to either phycoerythrin (sc-53622 PE) or fluorescein (sc-53622 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

**APPLICATIONS**

JAM-A (J3F.1) is recommended for detection of JAM-A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg 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 flow cytometry (1 µg per 1 x 10⁶ cells).

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

Molecular Weight of JAM-A: 36 kDa.

Positive Controls: human platelet extract: sc-363773, human PBL whole cell lysate or T84 whole cell lysate: sc-364797.

**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.

**DATA**

JAM-A (J3F.1) sc-53622. Western blot analysis of JAM-A expression in human platelet extract [A, B] and human PBL [D, E] and T84 [C, F] whole cell lysates under reducing (A, B, D) and non-reducing (E, F) conditions.

JAM1 (J10.4) sc-53628. Immunofluorescence staining of methanol fixed HeLa cells showing membrane localization [A]. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing membrane and cytoplasmic staining of hepatocytes (B).

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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