

# JAM-B (N-16): sc-23002

## 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

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- 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.
- 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.

## CHROMOSOMAL LOCATION

Genetic locus: JAM2 (human) mapping to 21q21.3.

## SOURCE

JAM-B (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of JAM-B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-23002 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

JAM-B (N-16) is recommended for detection of JAM-B of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JAM-B (N-16) is also recommended for detection of JAM-B in additional species, including equine.

Suitable for use as control antibody for JAM-B siRNA (h): sc-43141, JAM-B shRNA Plasmid (h): sc-43141-SH and JAM-B shRNA (h) Lentiviral Particles: sc-43141-V.

Molecular Weight of JAM-B: 54 kDa.

## 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 A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **JAM-B (1G4): sc-293496**, our highly recommended monoclonal alternative to JAM-B (N-16).