

# JAM-C (A-4): sc-515893

## 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, 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 $\alpha$  and IFN- $\gamma$  causes redistribution of junctional adhesion molecule in human endothelial cells. *J. Immunol.* 163: 553-557.

## CHROMOSOMAL LOCATION

Genetic locus: JAM3 (human) mapping to 11q25.

## SOURCE

JAM-C (A-4) is a mouse monoclonal antibody raised against amino acids 32-310 mapping at the C-terminus of JAM-C of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

JAM-C (A-4) is available conjugated to agarose (sc-515893 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515893 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515893 PE), fluorescein (sc-515893 FITC), Alexa Fluor® 488 (sc-515893 AF488), Alexa Fluor® 546 (sc-515893 AF546), Alexa Fluor® 594 (sc-515893 AF594) or Alexa Fluor® 647 (sc-515893 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515893 AF680) or Alexa Fluor® 790 (sc-515893 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

JAM-C (A-4) is recommended for detection of JAM-C of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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-C siRNA (h): sc-43872, JAM-C shRNA Plasmid (h): sc-43872-SH and JAM-C shRNA (h) Lentiviral Particles: sc-43872-V.

Molecular Weight (predicted) of JAM-C: 35 kDa.

Molecular Weight (observed) of JAM-C: 38 kDa.

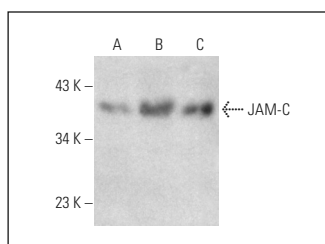
Molecular Weight of glycosylated JAM-C: 43-48 kDa.

Positive Controls: JAR cell lysate: sc-2276, human placenta extract: sc-363772 or JEG-3 whole cell lysate: sc-364255.

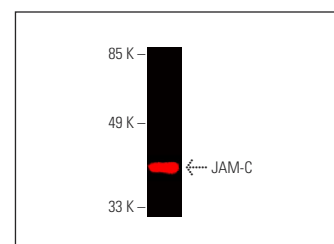
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



JAM-C (A-4): sc-515893. Western blot analysis of JAM-C expression in JAR (A) and JEG-3 (B) whole cell lysates and human placenta tissue extract (C).



JAM-C (A-4): sc-515893. Near-infrared western blot analysis of JAM-C expression in human placenta tissue extract. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG $\kappa$  BP-CFL 790: sc-516181.

## SELECT PRODUCT CITATIONS

1. Miranda, J., et al. 2019. Syncytiotrophoblast of placentae from women with Zika virus infection has altered tight junction protein expression and increased paracellular permeability. *Cells* 8 pii: E1174.

## RESEARCH USE

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