SANTA CRUZ BIOTECHNOLOGY, INC.

JAML (P-12): sc-79548

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The Power to Question

BACKGROUND

JAML (adhesion molecule, interacts with CXADR antigen 1), also known as junctional adhesion molecule-like, dendritic cell-specific protein CREA7-1, UNQ722/PRO1387, CREA7-4, AMICA1, Gm638, CREA7-1, FLJ37080, MGC-118815 or MGC118814, is a 394 amino acid single-pass type I membrane protein and novel adhesion molecule with localization at the cell plasma membrane in regions of cell-to-cell contact but not free cell borders, implying that JAML participates in homophilic interactions. JAML belongs to the immunoglobulin superfamily and is expressed in peripheral blood leukocytes, bone marrow, spleen, lymph nodes and fetal thymus, liver and spleen. JAML assists in the migration of leukocytes through endothelilal and epithelial tissues, mediates binding with CAR (coxsackie and adenovirus receptor) via its Ig-like V-type domain 2, and strengthens the binding of leukocytes to endothelial cells. Consisting of a transmembrane segment, cytoplasmic tail, 19-amino acid signal peptide and two extracellular immunoglobulin-like domains, JAML also undergoes alternative splicing resulting in three isoforms and is encoded by a gene mapping to human chromosome 11q23.3.

REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609770. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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5. Luissint, A.C., Lutz, P.G., Calderwood, D.A., Couraud, P.O. and Bourdoulous, S. 2008. JAML-mediated leukocyte adhesion to endothelial cells is regulated in cis by $\alpha 4/\beta 1$ integrin activation. J. Cell Biol. 183: 1159-1173.

CHROMOSOMAL LOCATION

Genetic locus: AMICA1 (human) mapping to 11q23.3.

SOURCE

JAML (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of JAML of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-79548 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JAML (P-12) is recommended for detection of JAML of human and rat 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).

JAML (P-12) is also recommended for detection of JAML in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for JAML siRNA (h): sc-75353, JAML shRNA Plasmid (h): sc-75353-SH and JAML shRNA (h) Lentiviral Particles: sc-75353-V.

Molecular Weight of JAML: 60 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 or our catalog for detailed protocols and support products.