

Mouse JAM3 / JAM-C Protein (His Tag)

Catalog Number: 50465-M08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

1110002N23Rik; JAM-3; JAM-C; Jcam3

Protein Construction:

A DNA sequence encoding the mouse JAM3 (NP_075766.1) extracellular domain (Met 1-Asn 241) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 94 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Val 32

Molecular Mass:

The secreted recombinant mouse JAM3 comprises 221 amino acids and has a predicted molecular mass of 25 kDa. As a result of glycosylation, the apparent molecular mass of rm JAM3 is approximately 30-35 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris-Citrate, 300mM NaCl, pH 6.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

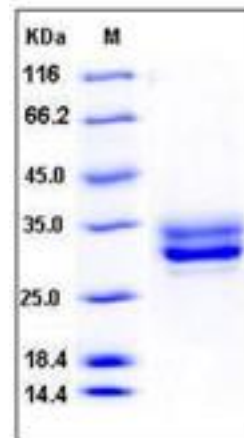
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Junctional Adhesion Molecule C Protein & Antibody (JAM-C, JAM3 Protein) also known as Junctional adhesion molecule 3, JAM3, is a single-pass type I membrane protein which belongs to the immunoglobulin superfamily. It is an adhesion molecule expressed by endothelial cells (ECs) that plays a role in tight junction formation, leukocyte adhesion, and transendothelial migration. JAM-C is an adhesion molecule that is expressed on cells within the vascular compartment and epithelial cells and, to date, has been largely studied in the context of inflammatory events. JAM-C is also expressed in peripheral nerves and that this expression is localized to Schwann cells at junctions between adjoining myelin end loops. JAM-C is a component of the atypical junctional attachments of Schwann cells and plays an important role in maintaining the integrity and function of myelinated peripheral nerves. JAM-C was recently shown to be a counter receptor for the leukocyte beta2-integrin Mac-1 (CD11b/CD18), thereby mediating interactions between vascular cells, particularly in inflammatory cell recruitment. JAM-C is up-regulated by oxidized low-density lipoprotein (LDL) and may thereby contribute to increased inflammatory cell recruitment during atherosclerosis. JAM-C may therefore provide a novel molecular target for antagonizing interactions between vascular cells in atherosclerosis. JAM-C was shown to undergo a heterophilic interaction with the leukocyte beta2 integrin Mac-1, thereby mediating interactions between vascular cells in inflammatory cell recruitment. JAM-C undergoes a homophilic interaction via the Arg64-Ile65-Glu66 motif on the membrane-distal Ig domain of the molecule. The homophilic interaction of JAM-C can mediate tumor cell-endothelial cell interactions and may thereby be involved in the process of tumor cell metastasis.

References

1. Keiper T, *et al.* (2005) The role of junctional adhesion molecule-C (JAM-C) in oxidized LDL-mediated leukocyte recruitment. *FASEB J.* 19(14): 2078-80.
2. Santoso S, *et al.* (2005) The homophilic binding of junctional adhesion molecule-C mediates tumor cell-endothelial cell interactions. *J Biol Chem.* 280(43): 36326-33.
3. Scheiermann C, *et al.* (2007) Expression and function of junctional adhesion molecule-C in myelinated peripheral nerves. *Science.* 318(5855): 1472-5.

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