Rat JAM-2 / JAM-B Protein (Fc Tag)

Catalog Number: **80376-R02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

JAM2

Protein Construction:

A DNA sequence encoding the rat JAM2 (Q3MHC0) (Met1-Asn236) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 90 % 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 ℃

Predicted N terminal: Phe 29

Molecular Mass:

The recombinant rat JAM2/Fc is a disulfide-linked homodimer. The reduced monomer comprises 449 amino acids and has a predicted molecular mass of 50.3 kDa. The apparent molecular mass of the protein is approximately 61 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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:

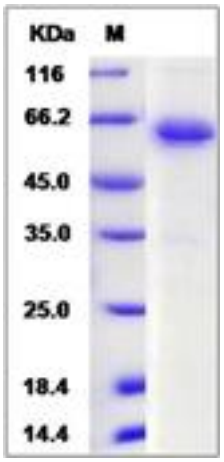
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Junctional adhesion molecule B (JAM-B), also known as Junctional adhesion molecule 2 (JAM2), Vascular endothelial junction-associated molecule (VE-JAM), and CD322, is a single-pass type I membrane protein which belongs to the immunoglobulin superfamily. It is prominently expressed on high endothelial venules. expression to be restricted to the high endothelial venule of tonsil and lymph nodes. The localization to the endothelium of arterioles in and around inflammatory and tumor foci. JAM-B can function as an adhesive ligand for the T cell line J45 and can interact with GM-CSF/IL-4-derived peripheral blood dendritic cells, circulating CD56(+) NK cells, circulating CD56(+)CD3(+) NK/T cells, and circulating CD56(+)CD3(+)CD8(+) cytolytic T cells. JAM-2 is expressed on high endothelial venules (HEVs) in human tonsil and on a subset of human leukocytes, suggesting that JAM-2 plays a central role in the regulation of transendothelial migration. It binds to very late activation antigen (VLA)-4, a leucocyte integrin that contributes to rolling and firm adhesion of lymphocytes to endothelial cells through binding to vascular cell adhesion molecule (VCAM)-1. JAM-B appears to contribute to leucocyte extravasation by facilitating not only transmigration but also rolling and adhesion. JAM-B acts as an adhesive ligand for interacting with a variety of immune cell types and may play a role in lymphocyte homing to secondary lymphoid organs.

References

1.Johnson-Lger CA, *et al.* (2002) Junctional adhesion molecule-2 (JAM-2) promotes lymphocyte transendothelial migration. Blood. 2100(7): 2479-86. 2.Liang TW, *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(4): 1618-26. 3.Ludwig RJ, *et al.* (2009) Junctional adhesion molecule (JAM)-B supports lymphocyte rolling and adhesion through interaction with alpha4beta1 integrin. Immunology. 128(2): 196-205.