Human SynCam / CADM1 / TSLC1 / IGSF4 Protein (His Tag)

Catalog Number: **11168-H08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

BL2; IGSF4; IGSF4A; Necl-2; NECL2; RA175; sgIGSF; ST17; sTSLC-1; SYNCAM; synCAM1; TSLC1

Protein Construction:

A DNA sequence encoding the human CADM1 (NP_055148.3) extracellular domain (Met 1-His 374) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 94 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA . Immobilized recombinant human CADM1 at 2 μg/ml (100 μl/well) can bind biotinylated human CRTAM with a linear range of 12.5-400 ng/ml .

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: Gln 45

Molecular Mass:

The secreted recombinant human CADM1 consists of 341 amino acids after removal of the signal peptide and has a predicted molecular mass of 38.5 kDa. As a result of glycosylation, the apparent molecular masss of rh CADM1 is approximately 70-80 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:

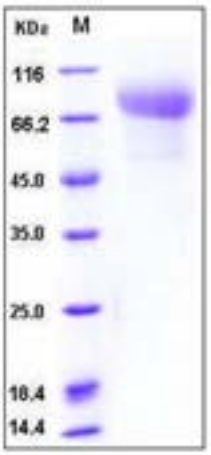
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Members of the immunoglobulin superfamily often play key roles in intercellular adhesion. IGSF4 is a novel immunoglobulin (Ig)-like intercellular adhesion molecule. Three Ig-like domains are included in the extracellular domain of IGSF4 and mediate homophilic or heterophilic interactions independently of Ca2+. The cytoplasmic domain of IGSF4 contains the binding motifs that connect to actin fibers. Since IGSF4 has been characterized by several independent research groups, this molecule is called by three names, TSLC1, SgIGSF and SynCAM. IGSF4 was first characterized as a tumor suppressor of non-small cell lung cancer and termed TSLC1. It is a single-pass type I membrane protein which belongs to the nectin family, which may be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons. In addition, CADM1 may play diverse roles in the spermatogenesis including in the adhesion of spermatocytes and spermatids to Sertoli cells and for their normal differentiation into mature spermatozoa. In neuroblastoma, loss of CADM1 expression has recently been found in disseminated tumours with adverse outcome, prompting us to investigate its role in neuroblastoma tumour progression. The downregulation of CADM1 tumour suppressor gene expression is a critical event in neuroblastoma pathogenesis resulting in tumour progression.

References

1.Watabe K, *et al.* (2003) IGSF4: a new intercellular adhesion molecule that is called by three names, TSLC1, SgIGSF and SynCAM, by virtue of its diverse function. Histol Histopathol. 18(4): 1321-9. 2.Fujita E, *et al.* (2005) Distribution of RA175/TSLC1/SynCAM, a member of the immunoglobulin superfamily, in the developing nervous system. Brain Res Dev Brain Res. 154(2): 199-209. 3.Fujita E, *et al.* (2006) Oligo-astheno-teratozoospermia in mice lacking RA175/TSLC1/SynCAM/IGSF4A, a cell adhesion molecule in the immunoglobulin superfamily. Mol Cell Biol. 26(2): 718-26.