

CADM1 Protein, Human, Recombinant (His), Biotinylated

General Information

Synonyms:	synCAM1;IGSF4A;SYNCAM;ST17;TSLC1;BL2;IGSF4;RA175;NECL2;sglIGSF;sTSLC-1;Necl-2
Protein Construction:	A DNA sequence encoding the Human CADM1 (NP_055148.3) (Met1-His374) was expressed, fused with a polyhistidine tag at the C-terminus. The purified protein was biotinylated in vitro.
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9BY67-1
Molecular Weight:	38.49 kDa (predicted); 74.8 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	1. Immobilized CRTAM Protein, Human, Recombinant (His) (Cat#TMPY-01674) at 2 µg/mL (100 µL/well) can bind CADM1 Protein, Human, Recombinant (His), Biotinylated (Cat#TMPY-07056), the EC50 is 70-220 ng/mL. 2. Loaded CADM1 Protein, Human, Recombinant (His), Biotinylated (Cat#TMPY-07056) on SA Biosensor, can bind CRTAM Protein, Human, Recombinant (His) (Cat#TMPY-01674) with an affinity constant of 81.8 nM as determined in BLI assay (Sartorius Octet RED384) (Routinely tested).
Purity:	≥ 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:

Please refer to the lot-specific COA.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481