



Recombinant Protein Technical Manual

Recombinant Human SynCam/CADM1 Protein (His Tag)(Active)

RPES1819

Product Data:

Product SKU: RPES1819

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_055148.3

Protein Information:

Molecular Mass: 38.5 kDa

AP Molecular Mass: 70-80 kDa

Tag: C-His

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.

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

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

Immunogen Information:

Sequence: Met 1-His 374

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 Ca^{2+} . 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.