

Recombinant Protein Technical Manual

Recombinant Human CADM3 Protein (His Tag)(Active) RPES2860

Product Data:

Product SKU: RPES2860 **Size:** 50μg

Species: Human Expression host: HEK293 Cells

Uniprot: NP 001120645.1

Protein Information:

Molecular Mass: 35.1 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of C6

Rat brain glial cells. Human CADM3 immobilized (0.8 μg/ml, 100 μl/well) will

mediate >30% C6 cell adhesion.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein 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:

Synonyms: Cell Adhesion Molecule 3; Brain Immunoglobulin Receptor; Immunoglobulin

Superfamily Member 4B; IgSF4B; Nectin-Like Protein 1; NECL; Synaptic Cell Adhesion Molecule 3; SynCAM3; TSLC1-Like Protein 1; TSLL1; CADM3; IGSF4B;

NECL1; SYNCAM3; TSLL1

Immunogen Information:

Sequence: Met 1-His 330

Background:

Cell Adhesion Molecules (CAMs) are proteins located on the cell surface involved with the binding with other cells or with the extracellular matrix (ECM) in the process called cell adhesion. These proteins are typically transmembrane receptors and are composed of three domains: an intracellular domain that interacts with the cytoskeleton, a transmembrane domain, and an extracellular domain that interacts either with other CAMs of the same kind (homophilic binding) or with other CAMs or the extracellular matrix (heterophilic binding). Cell adhesion molecule 3, also known as Immunoglobulin superfamily member 4B, CADM3, and NECL1, is a neural tissue-specific immunoglobulin-like cell-cell adhesion molecule which has Ca(2+)-independent homo- or heterophilic cell-cell adhesion activity and plays an important role in the formation of synapses, axon bundles and myelinated axons. Isoform 1 of CADM3 is expressed mainly in adult and fetal brain. Isoform 2 of CADM3 is highly expressed in adult brain and weakly expressed in placenta. In brain, Isoform 2 is highly expressed in cerebellum. CADM3 is involved in the cell-cell adhesion. It has both calcium-independent homophilic cell-cell adhesion activity and calcium-independent heterophilic cell-cell adhesion activity with IGSF4, PVRL1 and PVRL3. The interaction with EPB41L1 may regulate structure or function of cell-cell junctions. CADM3 may act as a tumor suppressor in glioma and loss of it in glioma may be caused by histone deacetylation.