



# Recombinant Protein Technical Manual

## Recombinant Mouse CADM3 Protein (His Tag)

RPES1875

### Product Data:

**Product SKU:** RPES1875

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_444429.1

### Protein Information:

**Molecular Mass:** 35 kDa

**AP Molecular Mass:** 37-42 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 98 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg 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:** BlgR;Igsf4b;Necl;Necl1;SynCAM3;Tsl11

## Immunogen Information:

**Sequence:** Met 1-His 328

## 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.