Recombinant Mouse SynCam/CADM1 Protein (aa 48-388, His Tag)

Catalog No. PKSM041349

Note: Centrifuge before opening to ensure complete recovery of vial contents.

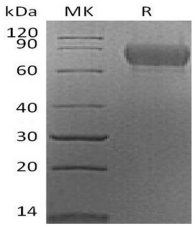
Description

Synonyms	Cell adhesion molecule 1;Immunoglobulin superfamily member 4;IgSF4;Nectin-like protein 2;NECL-2;Synaptic cell adhesion molecule;SynCAM;Tumor suppressor in lung cancer 1;TSLC-1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Gln48-His388
Accession	Q8R5M8
Calculated Molecular Weight	39.2 kDa
Observed molecular weight	60-100 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Cell adhesion molecule 1(CADM1) is a single-pass type I membrane protein and belongs to the nectin family. It contains 2 Ig-like C2-type (immunoglobulin-like) domains and 1 Ig-like V-type (immunoglobulin-like) domain. CADM1 acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells. Interaction with CRTAM promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8+ cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM3 in vivo. CADM1 may contribute to the less invasive phenotypes of lepidic growth tumor cells. In mast cells, it may mediate attachment to and promote communication with nerves. CADM1, together with MITF, is essential for development and survival of mast cells in vivo. The protein acts as a synaptic cell adhesion molecule and plays a role in the formation of dendritic spines and in synapse assembly. It may be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons. 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.