

Synonym

CADM1,BL2,IGSF4,IGSF-4,IGSF4A,NECL2,Necl-2,RA175,ST17,SYNCAM,TSLC1,sTSLC-1,sgIGSF,synCAM1,DKFZp686F1789,MGC149785,MGC51880

Source

Human CADM1, His Tag(CA1-H5225) is expressed from human 293 cells (HEK293). It contains AA Gln 45 - His 374 (Accession # [NP_055148.3](#)).

Predicted N-terminus: Gln 45

Molecular Characterization

CADM1(Gln 45 - His 374)
NP_055148.3 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 37.9 kDa. The protein migrates as 50 kDa and 55-85 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

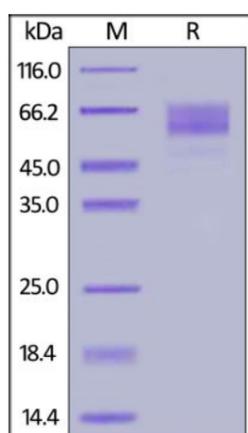
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

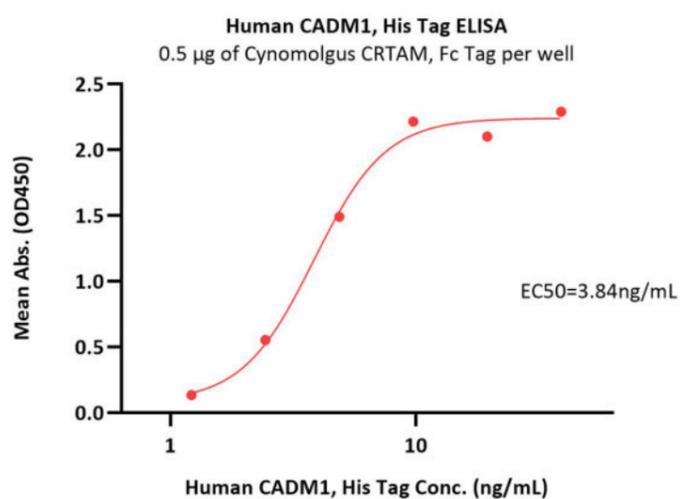
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

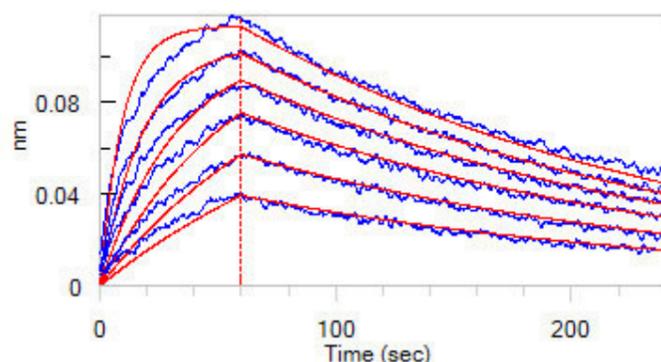
Human CADM1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

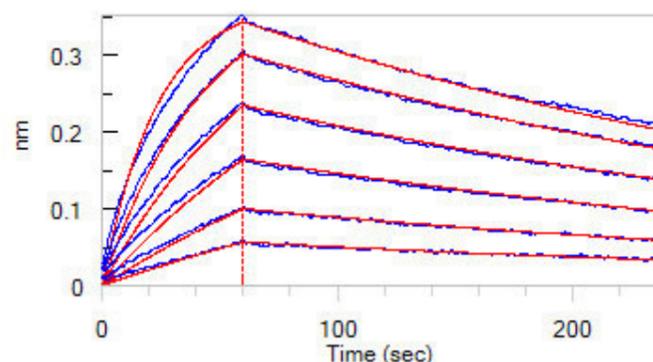


Immobilized Cynomolgus CRTAM, Fc Tag (Cat. No. CRM-C5255) at 5 µg/mL (100 µL/well) can bind Human CADM1, His Tag (Cat. No. CA1-H5225) with a linear range of 0.6-5 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human CRTAM, His Tag (Cat. No. CRM-H52H3) on AR2G Biosensor, can bind Human CADM1, His Tag (Cat. No. CA1-H5225) with an affinity constant of 51.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Cynomolgus CRTAM, Fc Tag (Cat. No. CRM-C5255) on Protein A Biosensor, can bind Human CADM1, His Tag (Cat. No. CA1-H5225) with an affinity constant of 37.7 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

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. Cell adhesion molecule 1 is a single-pass type I membrane protein which belongs to the nectin family. Cell Adhesion Molecule 1 contains two Ig-like C2-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain, and is also known as CADM1; BL2; DKFZp686F1789; IGSF4; IGSF4A; MGC149785; MGC51880; NECL2; Necl-2; RA175; ST17; SYNCAM; TSLC1; sTSLC-1; sgIGSF; synCAM1. CADM1 mediates heterophilic cell-cell adhesion with CADM3 and PVRL3 in a Ca²⁺-independent manner. CADM1 acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells. CADM1 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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.