

**Synonym**

CRTAM,CD355

**Source**

Cynomolgus CRTAM, Fc Tag(CRM-C5255) is expressed from human 293 cells (HEK293). It contains AA Ser 18 - Gly 287 (Accession # [XP\\_005580021.1](#)).

Predicted N-terminus: Ser 18

**Molecular Characterization**

|   |                                 |
|---|---------------------------------|
| CRTAM(Ser 18 - Gly 287)<br>XP_005580021.1 | Fc(Pro 100 - Lys 330)<br>P01857 |
|---|---------------------------------|

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 56.6 kDa. The protein migrates as 66-95 kDa under reducing (R) condition (SDS-PAGE) due to 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 Tris with Glycine, Arginine and NaCl, pH7.5 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.*

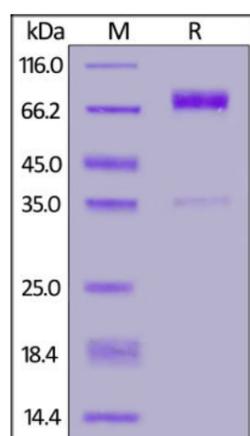
**Storage**

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:

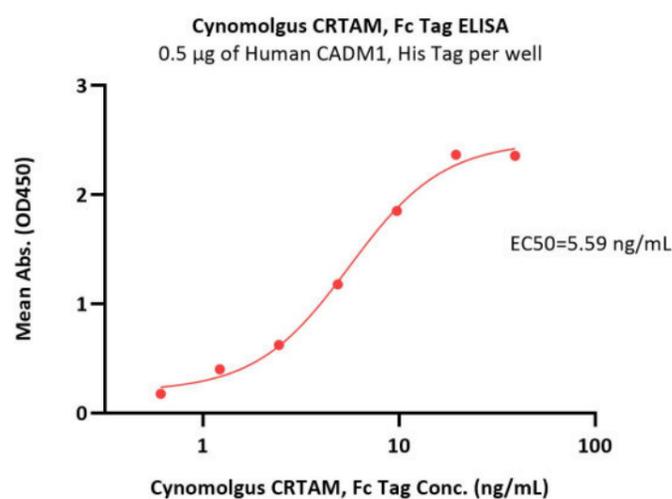
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Cynomolgus CRTAM, Fc Tag on SDS-PAGE under reducing (R) condition.

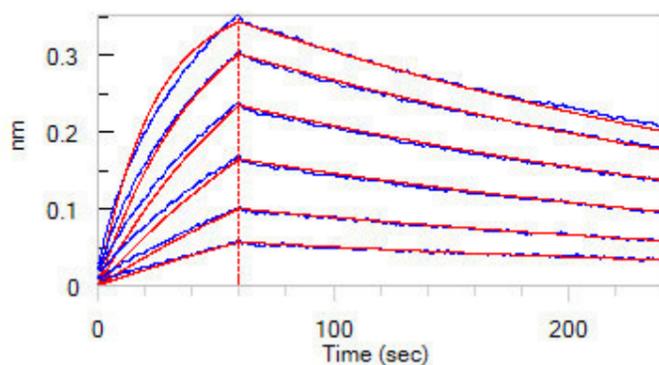
The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Human CADM1, His Tag (Cat. No. CA1-H5225) at 5 µg/mL (100 µL/well) can bind Cynomolgus CRTAM, Fc Tag (Cat. No. CRM-C5255) with a linear range of 0.6-10 ng/mL (QC tested).

### Bioactivity-BLI



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

Class I-restricted T cell-associated molecule (CRTAM), a member of nectin family and the immunoglobulin superfamily, is also known as cytotoxic and regulatory T-cell molecule, which is expressed by activated CD8<sup>+</sup> and NK T cells. CRTAM is found in spleen, thymus, small intestine, peripheral blood, and surprisingly, in brain where it is highly expressed by Purkinje cells of the cerebellum. The high affinity of CRTAM/IGSF4 adhesion allows CRTAM to disrupt IGSF4 homotypic interactions (3 - 5). IGSF4 and T cell receptor co-engagement of CRTAM-expressing CD8<sup>+</sup> cells induces increased IFN-gamma or IL-22 production (3, 4). Furthermore, a role in cancer surveillance through NK cell-mediated rejection of IGSF4-expressing tumors has been proposed.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.