Cynomolgus CRTAM Protein, Fc Tag

Catalog # CRM-C5255

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) XP_005580021.1	Fc(Pro 100 - Lys 330) 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 / rFC 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

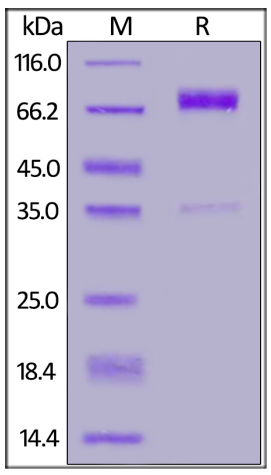
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

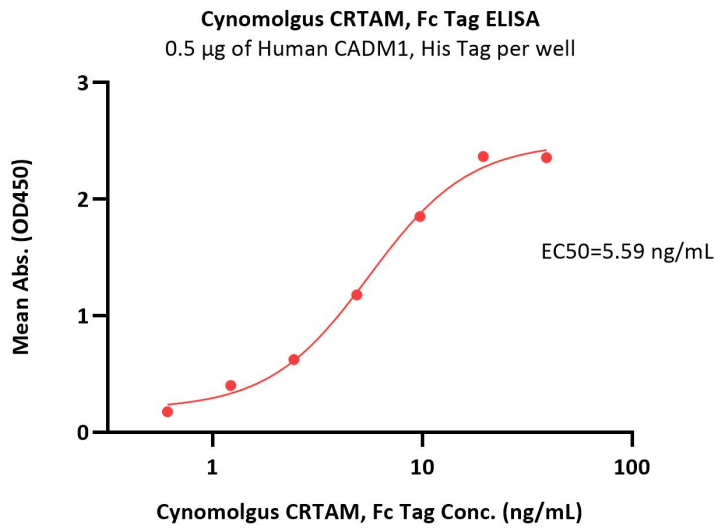
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



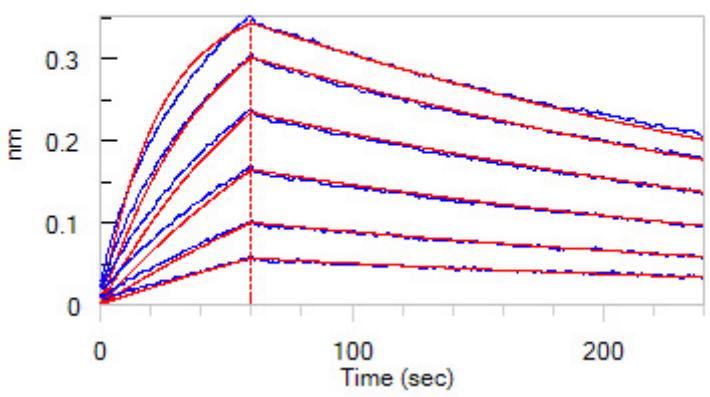
Cynomolgus CRTAM, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

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+ 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+ 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.