

Synonym

Complement C3, CPAMD1

Source

Cynomolgus Complement C3, His Tag(CO3-C52H5) is expressed from human 293 cells (HEK293). It contains AA Thr 23 - Asn 1663 (Accession # [G7PYU9-1](#)).

Predicted N-terminus: Thr 23

Molecular Characterization

Complement C3(Thr 23 - Asn 1663) G7PYU9-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus. The mature form of Complement component 3 is a disulfide-linked heterodimer composed of proteolytically cleaved α and β chain. Each α and β chain has a calculated MW of 71.3 kDa (β chain) and 113.0 kDa (α chain). The protein migrates as 64-68 kDa (β chain) and 100-120 kDa (α chain) and 160-180 kDa (intact Complement component 3) under reducing (R) condition (SDS-PAGE) due to glycosylation.

EndotoxinLess than 1.0 EU per μ g by the LAL method.**Purity**

>95% as determined by SDS-PAGE.

FormulationLyophilized from 0.22 μ m 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.

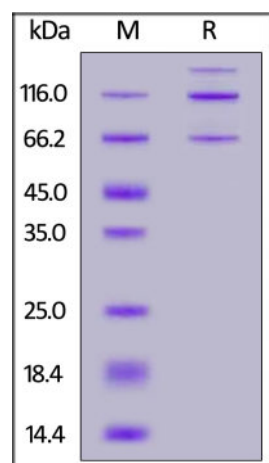
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

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

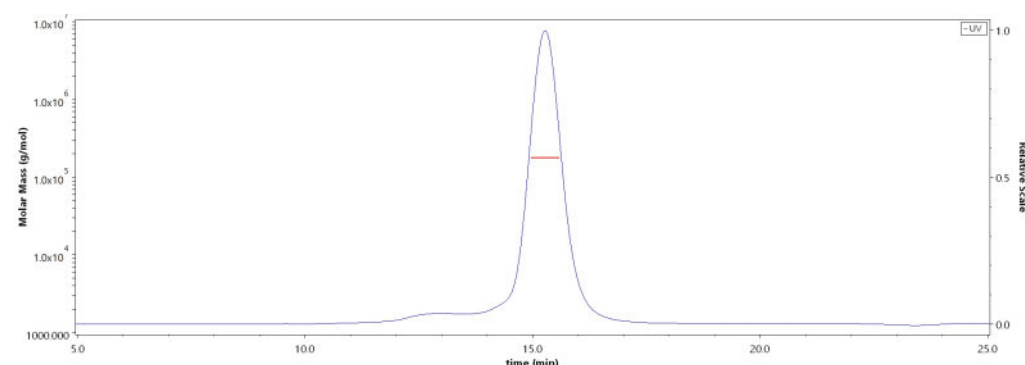
Please avoid repeated freeze-thaw cycles.

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.

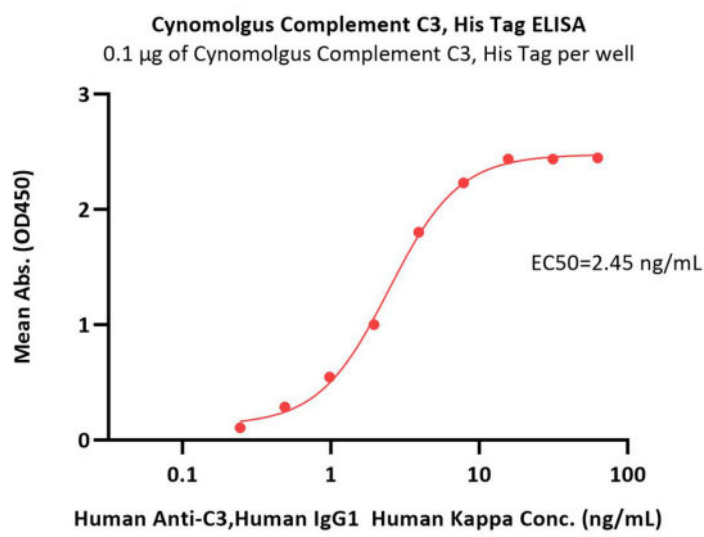
SDS-PAGE

Cynomolgus Complement C3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA**SEC-MALS**

The purity of Cynomolgus Complement C3, His Tag (Cat. No. CO3-C52H5) is more than 85% and the molecular weight of this protein is around 168-205 kDa verified by SEC-MALS.

[Report](#)



Immobilized Cynomolgus Complement C3, His Tag (Cat. No. CO3-C52H5) at 1 µg/mL (100 µL/well) can bind Human Anti-C3, Human IgG1 Human Kappa with a linear range of 0.2-8 ng/mL (QC tested).

Background

C3 is the major complement component serum. It is mainly synthesized by macrophages and liver. C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. It is cleaved into two fragments, C3a and C3b. C3a anaphylatoxin is a mediator of local inflammatory process. In chronic inflammation, acts as a chemoattractant for neutrophils. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes.

Clinical and Translational Updates

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