

Cynomolgus Complement C3 Protein, His Tag (MALS verified)

Catalog # CO3-C52H5



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

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  $\alpha$  and  $\beta$  chain. Each  $\alpha$  and  $\beta$  chain has a calculated MW of 71.3 kDa ( $\beta$  chain) and 113.0 kDa ( $\alpha$  chain). The protein migrates as 64-68 kDa ( $\beta$  chain) and 100-120 kDa ( $\alpha$  chain) and 160-180 kDa (intact Complement component 3) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22  $\mu$ 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.*

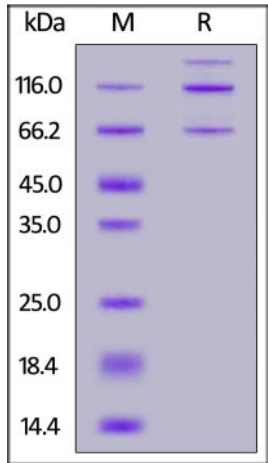
Storage

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:

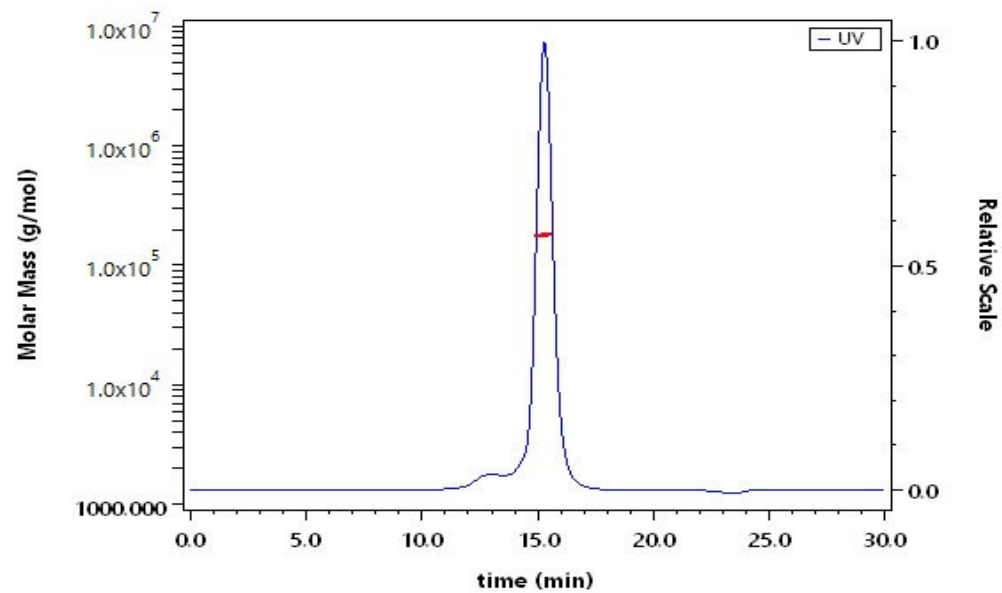
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Cynomolgus Complement C3, 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%.

SEC-MALS



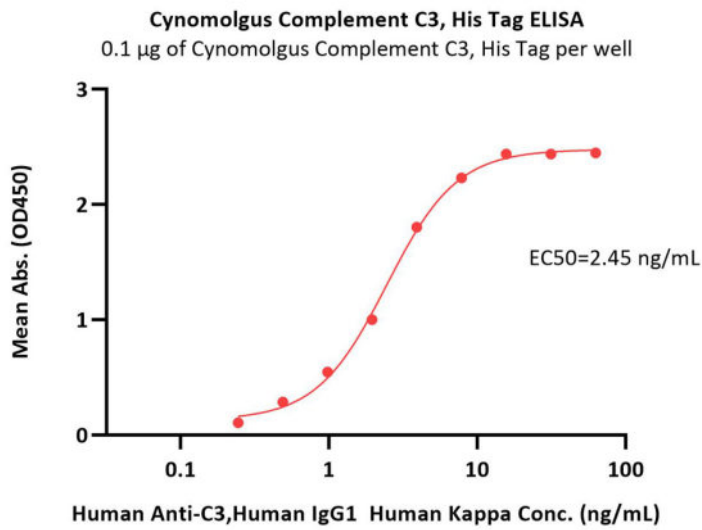
The purity of Cynomolgus Complement C3, His Tag (Cat. No. CO3-C52H5) is more than 85% and the molecular weight of this protein is around 168-205 kDa verified by SEC-MALS.  
[Report](#)

Bioactivity-ELISA



Cynomolgus Complement C3 Protein, His Tag (MALS verified)

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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.

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