

Synonym

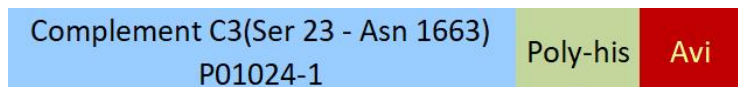
Complement C3,CPAMD1

Source

Biotinylated Human Complement C3, His,Avitag(CO3-H82E8) is expressed from human 293 cells (HEK293). It contains AA Ser 23 - Asn 1663 (Accession # [P01024-1](#)).

Predicted N-terminus: Ser 23

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 188.5 kDa. The protein migrates as 72 kDa,120-125 kDa and 200 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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

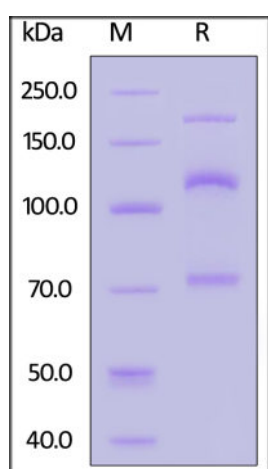
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

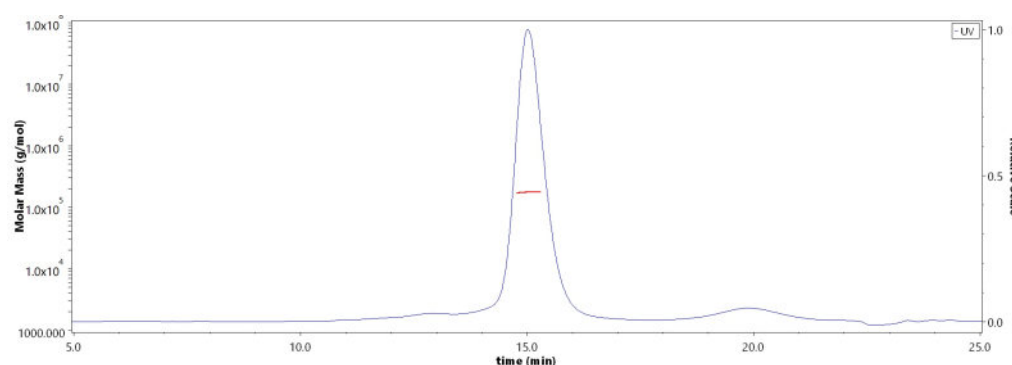
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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

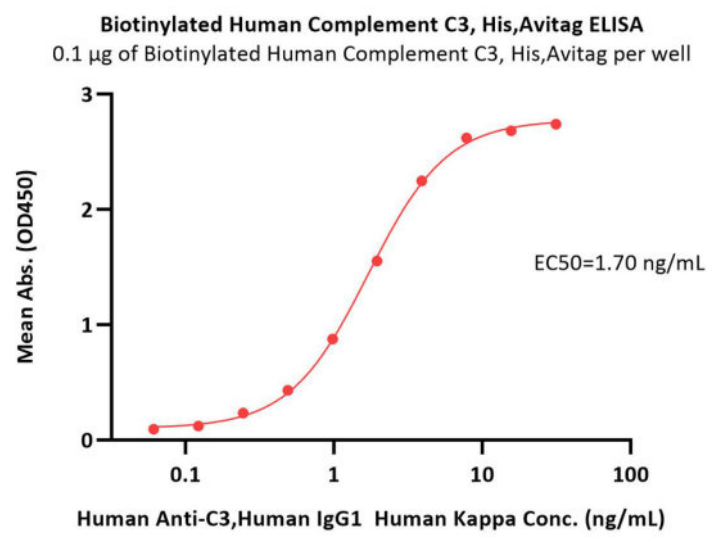
SEC-MALS



The purity of Biotinylated Human Complement C3, His,Avitag (Cat. No. CO3-H82E8) is more than 85% and the molecular weight of this protein is around 165-200 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA



Immobilized Biotinylated Human Complement C3, His,Avitag (Cat. No. CO3-H82E8) at 1 µg/mL (100 µL/well) on streptavidin precoated (0.5 µg/well) plate can bind Human Anti-C3, Human IgG1 Human Kappa with a linear range of 0.1-4 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.