

Synonym

Complement C3,CPAMD1

Source

Human Complement C3, His Tag(CO3-H52H3) is expressed from human 293 cells (HEK293). It contains AA Ser 23 - Asn 1663 (Accession # P01024-1). Predicted N-terminus: Ser 23

Molecular Characterization

Complement C3(Ser 23 - Asn 1663) P01024-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 186.8 kDa. The protein migrates as 80 kDa and 120-130 kDa and 200 kDa when calibrated against <u>Star Ribbon Pre-stained</u> <u>Protein Marker</u> 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.

>90% as determined by SEC-MALS.

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

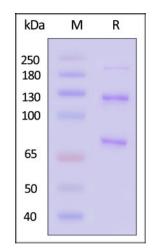
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

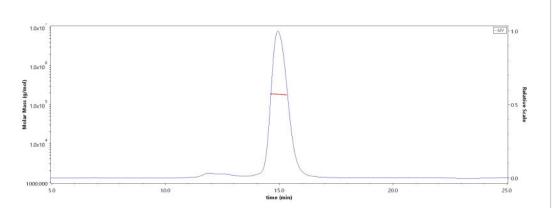
SDS-PAGE



Human 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% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

SEC-MALS



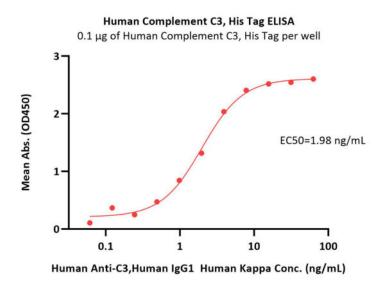
The purity of Human Complement C3, His Tag (Cat. No. CO3-H52H3) is more than 90% and the molecular weight of this protein is around 168-204 kDa verified by SEC-MALS.

<u>Report</u>

Human Complement C3 Protein, His Tag (MALS verified)







Immobilized Human Complement C3, His Tag (Cat. No. CO3-H52H3) at 1 μ g/mL (100 μ L/well) 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

