Mouse Complement C3a Protein, His Tag (HPLC verified)

Catalog # COA-M5243



Synonym

Complement C3a, Complement C3a, C3a

Source

Mouse Complement C3a Protein, His Tag(COA-M5243) is expressed from human 293 cells (HEK293). It contains AA Ser 671 - Arg 748 (Accession # P01027).

Predicted N-terminus: Ser 671

Molecular Characterization

Poly-his C3a(Ser 671 - Arg 748)
P01027

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

The protein has a calculated MW of 11.1 kDa. The protein migrates as 13-14 kDa when calibrated against <u>Star Ribbon Pre-stained 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-HPLC.

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

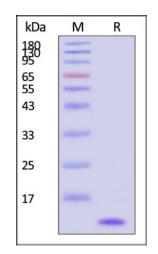
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

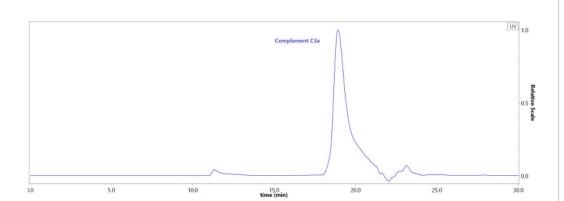
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse Complement C3a Protein, 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

SEC-HPLC



The purity of Mouse Complement C3a Protein, His Tag (Cat. No. COA-M5243) was greater than 90% as determined by SEC-HPLC.

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



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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

