Human Complement C3a Protein, His Tag

Catalog # COA-H5143

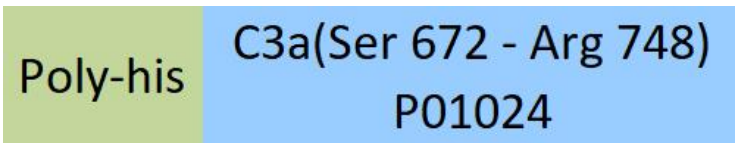
Synonym

Complement Component C3a,Complement C3a,C3a

Source

Human Complement C3a, His Tag(COA-H5143) is expressed from E. coli cells.
It contains AA Ser 672 - Arg 748 (Accession # P01024).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 22.5 kDa. The protein migrates as 12 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 0.2 M Arginine, 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

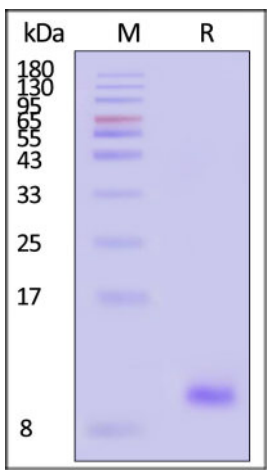
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 C3a, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

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.