Mouse Complement C3 Protein, His Tag (MALS verified)

Catalog # CO3-M52H4

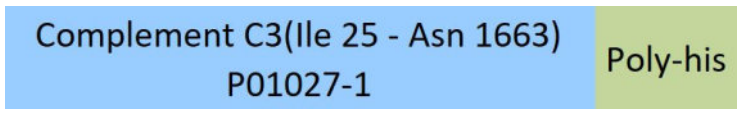
Synonym

Complement C3,CPAMD1

Source

Mouse Complement C3, His Tag (CO3-M52H4) is expressed from human 293 cells (HEK293). It contains AA Ile 25 - Asn 1663 (Accession # P01027-1). Predicted N-terminus: Ile 25

Molecular Characterization



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

The protein has a calculated MW of 186.1 kDa. The protein migrates as 70 kDa, 100-120 kDa and 160-180 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

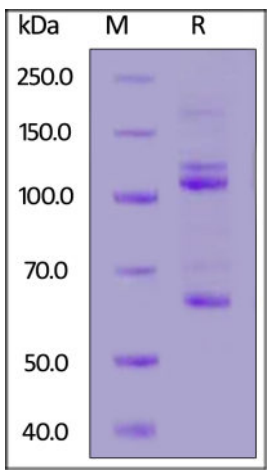
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

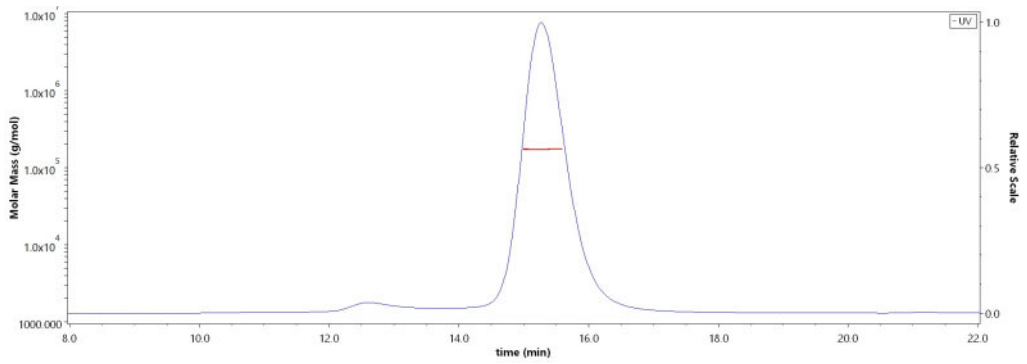
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse Complement C3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



The purity of Mouse Complement component 3, His Tag (Cat. No. CO3-M52H4) is more than 90% and the molecular weight of this protein is around 167-204 kDa verified by SEC-MALS.
Report

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.