

Mouse Complement C2 Protein, His Tag, low endotoxin (MALS verified)

Catalog # CO2-M52H3



Synonyms

C2, Complement C2, Complement Component C2

Source

Mouse Complement C2 Protein, His Tag (CO2-M52H3) is expressed from human 293 cells (HEK293). It contains AA Ala 19 - Leu 760 (Accession # [P21180-1](#)).

Predicted N-terminus: Ala 19

Molecular Characterization

Complement C2(Ala 19 - Leu 760) P21180-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 84.7 kDa. The protein migrates as 70-90 kDa and 100-120 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

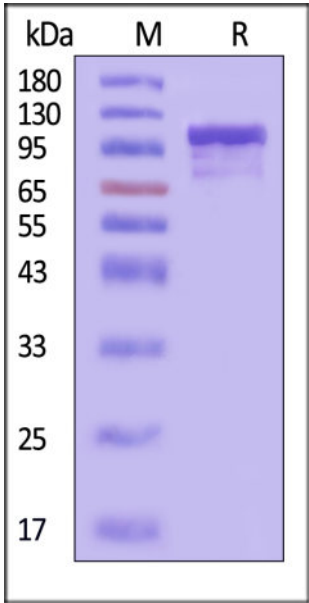
This product is stable after storage at:

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

ACRO Quality Management System

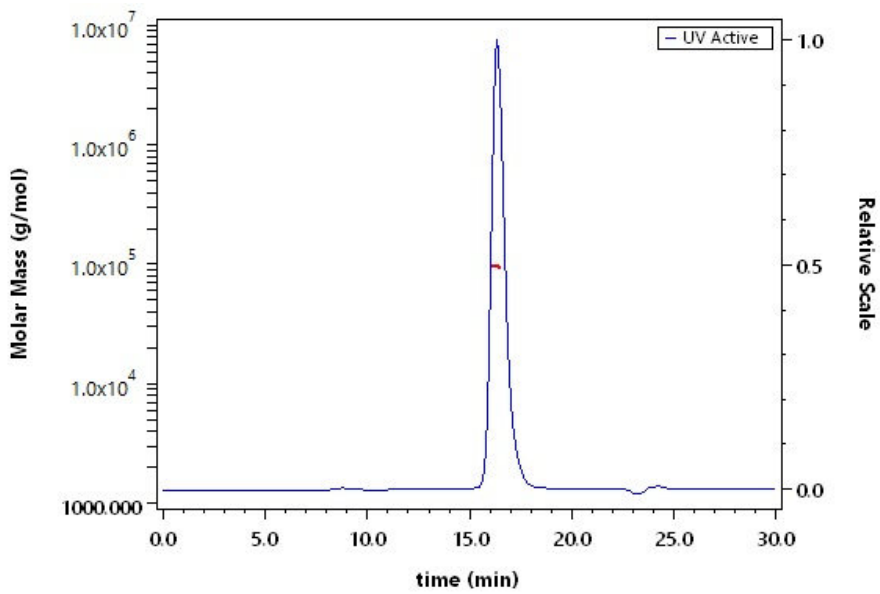
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



Mouse Complement C2 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 [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Mouse Complement C2 Protein, His Tag (Cat. No. CO2-M52H3) is more than 95% and the molecular weight of this protein is around 85-115 kDa verified by SEC-MALS.

Bioactivity

Measured by its ability to cleave a colorimetric peptide substrate, N-carbobenzyloxy-Gly-Arg-ThioBenzyl ester (Z-GR-SBzl), in the presence of 5,5'Dithio-bis (2-nitrobenzoic acid) (DTNB). The specific activity is >200 pmol/min/μg (QC tested).

Background

C2 is a major histocompatibility complex class-III protein. Component C2 which is part of the classical pathway of the complement system is cleaved by activated factor C1 into two fragments: C2b and C2a. C2a, a serine protease, then combines with complement factor C4b to generate the C3 or C5 convertase. The lectin (LP) and classical (CP) pathways are two of the three main activation cascades of the complement system. These pathways start with recognition of different pathogen- or danger-associated molecular patterns and include identical steps of proteolytic activation of complement component C4, formation of the C3 proconvertase C4b2, followed by cleavage of complement component C2 within C4b2 resulting in the C3 convertase C4b2a.



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