



### Synonym

Complement C5, C5, CPAMD4

### Source

Rabbit Complement C5, His Tag (CO5-R52H4) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Ala 1678 (Accession # [XP\\_008271599.1](#)).

Predicted N-terminus: Gln 19 ( $\beta$  chain) & Met 678 ( $\alpha$  chain)

### Molecular Characterization

Complement C5(Gln 19 - Ala 1678) XP_008271599.1	Poly-his
--	----------

This protein carries a polyhistidine tag at the C-terminus. The mature form of Complement C5 is a disulfide-linked heterodimer composed of proteolytically cleaved  $\alpha$  and  $\beta$  chain. During cultivation, Complement C5 will be partially processed into  $\alpha$  and  $\beta$  chain and has a calculated MW of 73.8 kDa ( $\beta$  chain) and 111.9 kDa ( $\alpha$  chain) respectively. The protein migrates as 80 kDa, 120 kDa and 200 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

### 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

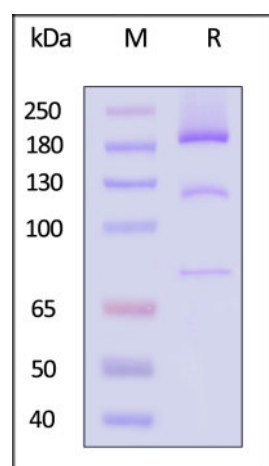
For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



Rabbit Complement C5, 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

Derived from proteolytic degradation of complement C5, C5 anaphylatoxin is a mediator of local inflammatory process. C5 precursor is first processed by the removal of 4 basic residues, forming two chains, beta and alpha, linked by a disulfide bond. C5 convertase activates C5 by cleaving the alpha chain, releasing C5a anaphylatoxin and generating C5b (beta chain + alpha' chain). Activation of C5 by a C5 convertase initiates the spontaneous assembly of the late complement components, C5-C9, into the membrane attack complex. C5b has a transient binding site for C6. The C5b-C6 complex is the foundation upon which the lytic

Discounts, Gifts,  
and more!



## Rabbit Complement C5 Protein, His Tag

Catalog # CO5-R52H4



BIOSYSTEMS  
**Acro**

complex is assembled. The C5a anaphylatoxin interacts with C5AR1 and tick complement inhibitor. C5a is also a potent chemokine which stimulates the locomotion of polymorphonuclear leukocytes and directs their migration toward sites of inflammation.

### Clinical and Translational Updates

Discounts, Gifts,  
and more!



➤ [www.acrobiosystems.com](http://www.acrobiosystems.com)

10/11/2024