

## Recombinant Human C5 protein (R885H), His-tagged

Cat. No. C5-9288H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human C5 (R885H) protein (Gln19-Cys1676) protein was fused to His-tag at C-terminus and expressed in human 293 cells (HEK293).
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	Gln19-Cys1676
<b>Description</b>	<p>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 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.</p>
<b>Predicted N Terminal</b>	Gln19
<b>Form</b>	Lyophilized from 0.22

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

µm filtered solution in PBS, pH7.4, 10% trehalose.

**Molecular Mass**

The mature form of Complement C5 is a disulfide-linked heterodimer composed of proteolytically cleaved α and β chain. Each α and β chain has a calculated MW of 73.9 kDa (β chain) and 114.7 kDa (α chain). The protein migrates as 76 kDa (β chain) and 116 kDa (α chain) 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.

**Storage**

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

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

-20 to -70 centigrade for 12 months in lyophilized state;

-70 centigrade for 3 months under sterile conditions after reconstitution.

**Reconstitution**

It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

**Gene Name**

C5

**Official Symbol**

C5

**Synonyms**

C5; complement component 5; complement C5; CPAMD4; anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4;

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FLJ17816; FLJ17822; MGC142298

**Gene ID** [727](#)

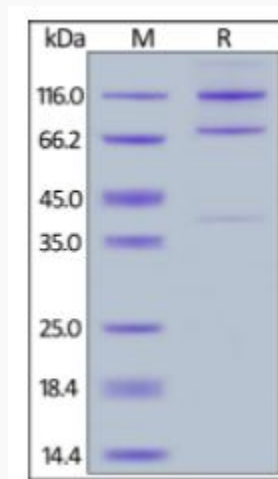
**mRNA Refseq** [NM\\_001735](#)

**Protein Refseq** [NP\\_001726](#)

**MIM** [120900](#)

**UniProt ID** [P01031](#)

**SDS-PAGE of C5-9288H**



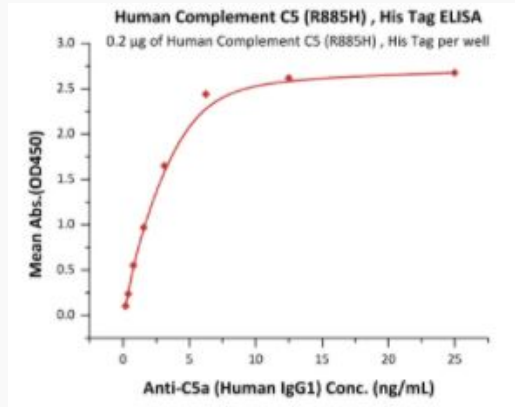
Human Complement C5 (R885H), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

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### Bioactivity-ELISA of C5-9288H



Immobilized Human Complement C5 (R885H), His Tag at 2 µg/mL (100 µL/well) can bind Anti-C5a (Human IgG1) with a linear range of 0.2-6 ng/mL (QC tested).

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