

## Recombinant Mouse C5 protein, His-tagged

Cat. No. C5-512M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse Complement C5, His Tag is expressed from human 293 cells(HEK293). It contains AA Gln19-Glu1680(Accession #P06684-1).
<b>Species</b>	Mouse
<b>Source</b>	HEK293
<b>ProteinLength</b>	Gln19-Glu1680
<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>Form</b>	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4, 10% trehalose.
<b>Molecular Mass</b>	This protein carries a polyhistidine tag at the C-terminus. The mature form of

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Complement C5 is a disulfide-linked heterodimer composed of proteolytically cleaved  $\alpha$  and  $\beta$  chain. Each  $\alpha$  and  $\beta$  chain has a calculated MW of 73.5 kDa ( $\beta$ chain) and 114.6 kDa ( $\alpha$ chain). The protein migrates as 66 kDa ( $\beta$  chain) and 100 kDa ( $\alpha$ chain) under reducing (R) condition (SDS-PAGE) due to glycosylation.

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

**Purity** >95% as determined by SDS-PAGE.

**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.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2  $\mu$ g/ $\mu$ l. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

**Gene Name** Hc

**Official Symbol** Hc

**Synonyms** Complement C5, C5, CPAMD4

**Gene ID** 15139

**mRNA Refseq** NM\_010406.3

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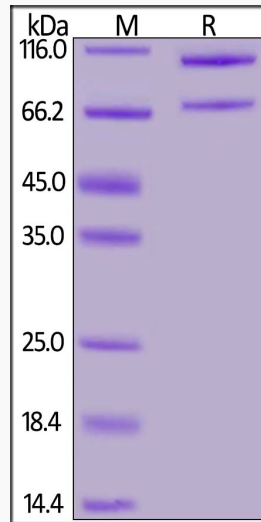
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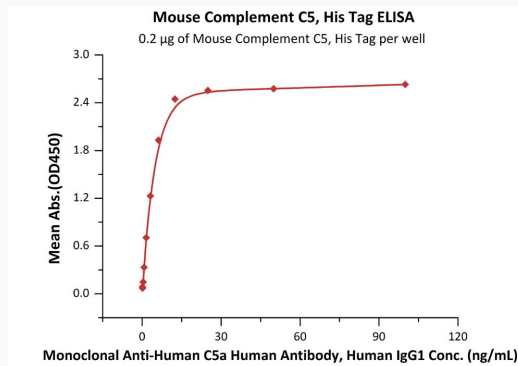
**Protein Refseq** NP\_034536.3

**UniProt ID** P06684

**SDS-PAGE of C5-512M**



**Bioactivity-ELISA of C5-512M**



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