Active Recombinant Mouse Hc Protein, His Tagged

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

SPECIFICATION

Product Overview	Mouse Complement C5, His Tag is expressed from human 293 cells (HEK293). It contains AA Gln 19-Leu 678 & Asn 679-Glu 1680 (Accession # P06684-1). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Gln 19 (β chain) & Asn 679 (α chain)
Species	Mouse
Source	HEK293
ProteinLength	19-678 aa & 679-1680 aa
Description	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.

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Form	Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.
Bio-activity	Immobilized Mouse Complement C5, His Tag at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-Human C5a Human Antibody, Human IgG1 with a linear range of 0.1-13 ng/mL.
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 73.5 kDa (β chain) and 114.6 kDa (α chain). The protein migrates as 66 kDa (β chain) and 100 kDa (α chain) when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU/μg by the LAL method/rFC method.
Purity	>95% as determined by SDS-PAGE.
Storage	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. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 μg/μL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	Hc hemolytic complement [Mus musculus (house mouse)]
Official Symbol	Hc

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Synonyms	HC; hemolytic complement; complement C5; C5; He; C5a;
Gene ID	15139
mRNA Refseq	NM_010406
Protein Refseq	NP_034536
UniProt ID	P06684

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