

Active Recombinant Human C5 (R885H) Protein, His Tagged

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

SPECIFICATION

Product Overview Human Complement C5 (R885H), His Tag is expressed from human 293 cells (HEK293). It contains AA Gln 19-Arg 677 & Thr 678-Cys 1676 (Accession # P01031-1 (R885H)). This protein carries a polyhistidine tag at the C-terminus. Predicted N-terminus: Gln 19 (β chain) & Thr 678 (α chain)

Species Human

Source HEK293

ProteinLength 19-677 aa & 678-1676 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.

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.
Bio-activity	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.
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 70 kDa (β chain) and 110-120 kDa (α chain) when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition, and 180 kDa under non-reducing (NR) condition (SDS-PAGE).
Endotoxin	Less than 1.0 EU/µg by the LAL method/rFC method.
Purity	>90% 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	C5 complement component 5 [Homo sapiens (human)]
Official Symbol	C5

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Synonyms	C5; complement component 5; complement C5; CPAMD4; anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4; FLJ17816; FLJ17822; MGC142298;
Gene ID	727
mRNA Refseq	NM_001735
Protein Refseq	NP_001726
MIM	120900
UniProt ID	P01031

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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