





# Recombinant Human Complement C3 (C3), partial

<b>Product Code</b>	CSB-EP355590HU
Relevance	C3 plays a central role in the activation of the complent syst. Its processing by C3 convertase is the central reaction in both classical and alternative complent pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. Derived from proteolytic degradation of complent C3, C3a anaphylatoxin is a mediator of local inflammatory process. In chronic inflammation, acts as a choattractant for neutrophils. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. C3-beta-c: Acts as a choattractant for neutrophils in chronic inflammation. Acylation stimulating protein: adipogenic hormone that stimulates triglyceride (TG) synthesis and glucose transport in adipocytes, regulating fat storage and playing a role in postprandial TG clearance. Appears to stimulate TG synthesis via activation of the PLC, MAPK and AKT signaling pathways. Ligand for C5AR2. Promotes the phosphorylation, ARRB2-mediated internalization and recycling of C5AR2
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P01024
Alias	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YSIITPNILRLESEETMVLEAHDAQGDVPVTVTVHDFPGKKLVLSSEKTVLTPAT NHMGNVTFTIPANREFKSEKGRNKFVTVQATFGTQVVEKVVLVSLQSGYLFIQ TDKTIYTPGSTVLYRIFTVNHKLLPVGRTVMVNIENPEGIPVKQDSLSSQNQLG VLPLSWDIPELVNMGQWKIRAYYENSPQQVFSTEFEVK
Lead Time	3-7 business days
Research Area	Immunology
Source	E.coli
Gene Names	C3
Expression Region	26-225aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	26.4kDa





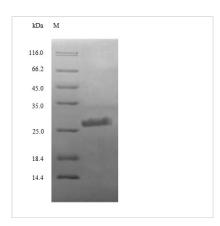




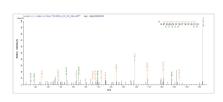
## **Protein Description**

### **Partial**

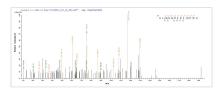
#### **Image**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-RP105994h could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) C3.



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#### Description

Recombinant Human Complement C3 (C3) is a partial-length protein expressed with N-terminal 6xHis-tagged in the E.coli. Its expression region corresponds to 26-225aa of human C3 protein. Its purity was determined by SDS-PAGE and reached up to 90% and presented a molecular mass band of 26.4kDa on the gel. This recombinant C3 protein may be used to synthesize antibodies against C3. C3 proteins in-stock are available.

Complement C3(C3) plays a central role in the activation of complement system. Its activation by C3 convertase is required for both classical and alternative complement activation pathways. C3 mutations are associated with atypical hemolytic uremic syndrome and age-related macular degeneration in human patients. Diseases associated with C3 include Complement Component 3 Deficiency, Autosomal Recessive and Hemolytic Uremic Syndrome, Atypical 5.

#### Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.