

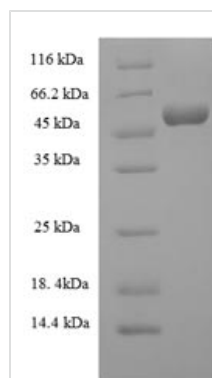


Recombinant Mouse Complement C3 (C3), partial

Product Code	CSB-EP365507MO
Relevance	C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. Derived from proteolytic degradation of complement C3, C3a anaphylatoxin is a mediator of local inflammatory process. In chronic inflammation, acts as a chemoattractant for neutrophils. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. The short isoform has B-cell stimulatory activity. C3-beta-c: Acts as a chemoattractant 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.
Abbreviation	Recombinant Mouse C3 protein, partial
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.	P01027
Product Type	Recombinant Proteins
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SEETKQNEAFSLTAKGKGRGTLSSVAVYHAKLKSKVTCKKFDLRVSIRPAPET AKKP EEA KNTMFLEICTKYLGDVDATMSILDISM MTGFAPDTKDLELLASGVDR YISKYEMNKAFSNKNTLIYLEKISHT EEDCLTFKVHQYFNVGLIQPGSVKVYSY YNLEESCTRFYHPEKDDGMLSKLCHSEMCRCAEENC FMQQSQEKINLNVRLD KACEPGVDYVYKTEL TNIELDDFDEYTM TIQQVIKSGSDEVQAGQQRKFISHI KCRNALKLQKGKKYLMWGLSSDLWG EKPN TSYIIGKDTWVEHWPEAE ECQD QKYQKQCEELGAFTESMVVYGCPN
Research Area	Others
Source	E.coli
Target Names	C3
Protein Names	Recommended name: Complement C3 Alternative name(s): HSE-MSF Cleaved into the following 10 chains: 1. Complement C3 beta chain 2. Complement C3 alpha chain 3. C3a anaphylatoxin 4. Complement C3b alpha' chain 5. Complement C3c alpha' chain
Expression Region	1321-1663aa



Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	55.3kDa
Protein Length	Partial

Image


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

Description

Recombinant Mouse Complement C3 (C3) is a partial-length protein expressed with N-terminal 6xHis-SUMO-tagged in the E.coli. Its expression region corresponds to 1321-1663aa of mouse C3 protein. Its purity was determined by SDS-PAGE and reached up to 90% and presented a molecular mass band of 55.3kDa 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.

Shelf Life

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.