

Datasheet for ABIN3091806

C5 Protein (AA 752-1676) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	C5
Protein Characteristics:	AA 752-1676
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This C5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	LHMKTLTPVS KPEIRSYFPE SWLWEVHLVP RRRKQLQFALP DSLTTWEIQG VGISNTGICV ADTVKAKVFK DVFLEMNIPY SVVRGEQIQL KGTVYNYRTS GMQFCVKMSA VEGICTSESP VIDHQGTKSS KCVRRQKEGS SSVLVTFTVL PLEIGHLNIN FSLETWFGKE ILVKTLRVVP EGVKRESYSG VTLDPRGIYG TISRRKEFPY RIPLDLVPKT EIKRILSVKG LLVGEILSAV LSQEGINILT HLPKGSAAEAE LMSVVPVFYV FHYLETGNHW NIFHSDPLIE KQKLKKKKLKE GMLSIMSYRN ADYSYSVWKG GSASTWLTAF ALRVLGQVKN YVEQNQNSIC NSLLWLVENY QLDNGSFKEN SQYQPIKLQG TLPVEARENS LYLTAFTVIG IRKAFDICPL VKIDTALIKA DNFLLENTLP AQSTFTLAIS AYALSLGDKT HPQFRSIVSA LKREALVKGN PPIYRFWKDN LQHKDSSVPN TGTARMVETT AYALLTSLNL KDINYVNPVI KWLSEEQRYG GGFYSTQDTI NAEGLTEYS LLVKQLRLSM DIDVSYKHKG ALHNYKMTDK NFLGRPVEVL LNDDLIVSTG FGSGLATVHV TTVVHKTSTS EEVCSFYLKI DTQDIEASHY RGYGNSDYKR IVACASYKPS REESSSGSSH AVMDISLPTG ISANEEDLKA LVEGVDQLFT DYQIKDGHVI LQLNSIPSSD FLCVRFRIFE LFEVGFLSPA
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TFTVYEYHRP DKQCTMFYST SNIQIKVCE GAACKCVEAD CGQMQEELDL TISAETRKQT
ACKPEIAYAY KVSITSITVE NVFVKYKATL LDIYKTGEAV AEKDSEITFI KKVCTNAEL
VKGRQYLIMG KEALQIKYNF SFRYIYPLDS LTWIEYWPRD TTCSSCQAFI ANLDEFAEDI FLNGC

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human C5 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: C5

Alternative Name: C5 ([C5 Products](#))

Background: 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., Derived from proteolytic degradation of complement C5, C5 anaphylatoxin is a mediator of local inflammatory process. Binding to the receptor C5AR1 induces a variety of responses including intracellular calcium release, contraction of smooth muscle, increased vascular permeability, and histamine release from mast cells and basophilic leukocytes (PubMed:8182049). C5a is also a potent chemokine which stimulates the locomotion of polymorphonuclear leukocytes and directs their migration toward sites of inflammation. {ECO:0000269|PubMed:8182049}.

Molecular Weight: 105.2 kDa Including tag.

UniProt: [P01031](#)

Pathways: [Complement System](#), [Carbohydrate Homeostasis](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process