

Product datasheet

Recombinant human C5 protein ab167724

1 Image

Overview

Product name	Recombinant human C5 protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Escherichia coli
Amino Acid Sequence	
Accession	P01031
Species	Human
Sequence	LQKKIEEIAAKYKHSVVKCCYDGACVNNDETCEQRA ARISLGPRCIKAF TECCVVASQLRANISHKDMQLGR
Molecular weight	8 kDa
Amino acids	679 to 751

Specifications

Our [Abpromise guarantee](#) covers the use of **ab167724** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Biological activity	ab167724 is active based on enzyme release assay of myeloperoxidase. The ED ₅₀ = 1.36 nM.
Applications	SDS-PAGE Functional Studies
Endotoxin level	< 1.000 Eu/µg
Purity	>95% by SDS-PAGE .
Form	Lyophilised

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
------------------------------	--

pH: 7.40

Constituent: 99% PBS

Note: Normally trehalose and mannitol are added as protectants before lyophilization.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

It is recommended to reconstitute the lyophilized protein in 50µl sterile deionized water to a final concentration of 1mg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.

General Info

Function

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. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. C5a also stimulates the locomotion of polymorphonuclear leukocytes (chemokinesis) and direct their migration toward sites of inflammation (chemotaxis).

Involvement in disease

Defects in C5 are the cause of complement component 5 deficiency (C5D) [MIM:609536]. A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by *Neisseria gonorrhoeae* or *Neisseria meningitidis*. Note=An association study of C5 haplotypes and genotypes in individuals with chronic hepatitis C virus infection shows that individuals homozygous for the C5_1 haplotype have a significantly higher stage of liver fibrosis than individuals carrying at least 1 other allele (PubMed:15995705).

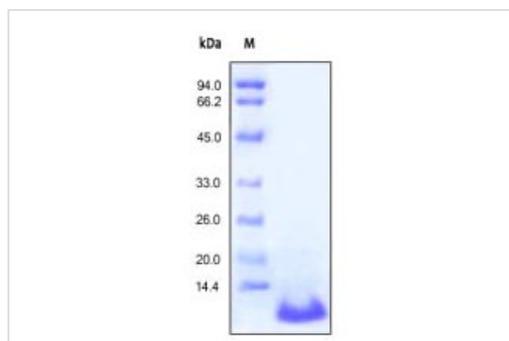
Sequence similarities

Contains 1 anaphylatoxin-like domain.
Contains 1 NTR domain.

Cellular localization

Secreted.

Images



SDS-PAGE - Recombinant human C5 protein
(ab167724)

SDS-PAGE of reduced ab167724 stained overnight with
Coomassie Blue (6µg).

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors