# abcam

## Product datasheet

# Recombinant Human C4b protein (Tagged) ab236195

### 1 Image

**Description** 

Product name Recombinant Human C4b protein (Tagged)

Purity > 90 % SDS-PAGE.

Expression system Escherichia coli

Accession P0C0L5

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** EAPKVVEEQESRVHYTVCIWRNGKVGLSGMAIADVTLLSG

**FHALRADLEK** 

LTSLSDRYVSHFETEGPHVLLYFDSVPTSRECVGFEAVQE

**VPVGLVQPAS** 

ATLYDYYNPERRCSVFYGAPSKSRLLATLCSAEVCQCAE

**GKCPRQRRALE** 

RGLQDEDGYRMKFACYYPRVEYGFQVKVLREDSRAAFRL

**FETKITQVLHF** 

TKDVKAAANQMRNFLVRASCRLRLEPGKEYLIMGLDGATY

**DLEGHPQYLL** 

DSNSWIEEMPSERLCRSTRQRAACAQLNDFLQEYGTQGC

QV

Predicted molecular weight 49 kDa including tags

Amino acids 1454 to 1744

Tags His tag N-Terminus

**Additional sequence information** N-terminal 6xHis-SUMO-tagged.

**Specifications** 

Our Abpromise quarantee covers the use of ab236195 in the following tested applications.

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

Applications SDS-PAGE

Form Liquid

1

#### **Preparation and Storage**

#### Stability and Storage Shipped

Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.2

Constituents: 50% Glycerol (glycerin, glycerine), Tris buffer

#### General Info

#### **Function** C4 plays a central role in the activation of the classical pathway of the complement system. It is

processed by activated C1 which removes from the alpha chain the C4a anaphylatoxin. The remaining alpha chain fragment C4b is the major activation product and is an essential subunit of the C3 convertase (C4b2a) and the C5 convertase (C3bC4b2a) enzymes of the classical

complement pathway.

 $Derived \ from \ proteolytic \ degradation \ of \ complement \ C4, \ C4a \ anaphylatoxin \ is \ a \ mediator \ of \ local$ 

inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes.

Sequence similarities Contains 1 anaphylatoxin-like domain.

Contains 1 NTR domain.

Post-translational modifications

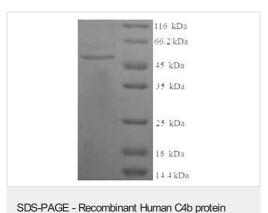
Prior to secretion, the single-chain precursor is enzymatically cleaved to yield the non-identical chains (alpha, beta and gamma). During activation, the alpha chain is cleaved by C1 into C4a and C4b, and C4b stays linked to the beta and gamma chains. Further degradation of C4b by C1 into

the inactive fragments C4c and C4d blocks the generation of C3 convertase.

**Cellular localization** 

Secreted.

#### **Images**



SDS-PAGE - Recombinant Human C4b protein

(Tagged) (ab236195)

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis with 5% enrichment gel and 15% separation gel using ab236195.

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