

Product datasheet

Anti-C4d antibody ab36075

★★★★★ [5 Abreviews](#) [6 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-C4d antibody |
| Description | Rabbit polyclonal to C4d |
| Host species | Rabbit |
| Specificity | Recognizes C4d-A and C4d-B. |
| Tested applications | Suitable for: IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide corresponding to Human C4d aa 1223-1237 (C terminal) conjugated to keyhole limpet haemocyanin. Region 100% conserved in C4d-B (Uniprot: P0C0L5) Sequence: ETGDNLYWGSVTGSQ |

Database link: [P0C0L4](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| Storage buffer | pH: 7.20 Constituents: 99% PBS, 0.1% Proclin 300 |
| Purity | Protein G purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab36075 in the following tested applications.

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

| Application | Abreviews | Notes |
|-------------|-----------|---|
| IHC-P | ★★★★★ (2) | 1/20 - 1/80. Antigen retrieval with a citrate buffer system (or equivalent) is recommended. |

Target

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.

Involvement in disease

Defects in C4A are the cause of complement component 4A deficiency (C4AD) [MIM:120810]. A rare defect of the complement classical pathway associated with the development of autoimmune disorders, mainly systemic lupus with or without associated glomerulonephritis.

Sequence similarities

Contains 1 anaphylatoxin-like domain.

Contains 1 NTR domain.

Post-translational modifications

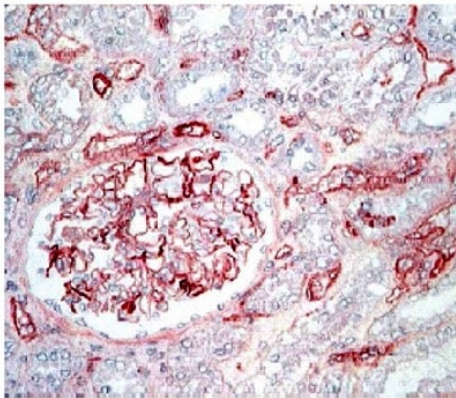
Prior to secretion, the single-chain precursor is enzymatically cleaved to yield the non-identical chains (alpha, beta and gamma). During activation, the alpha chain is cleaved by C1 into C4a and C4b, and C4b stays linked to the beta and gamma chains. Further degradation of C4b by C1 into the inactive fragments C4c and C4d blocks the generation of C3 convertase.

N- and O-glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.

Cellular localization

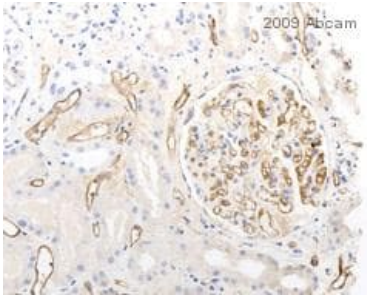
Secreted.

Images



Immunohistochemical analysis of C4d expression in paraffin embedded formalin fixed human glomerular mesangial tissue, using 1/40 ab36075. Staining developed using high sensitivity Avidin/Biotin detection system.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C4d antibody (ab36075)



Ab36075 staining C4d in Human kidney tissue sections by Immunohistochemistry (IHC-P- paraformaldehyde-fixed, paraffin embedded sections). Tissue was fixed with formaldehyde and heat mediated antigen retrieval was performed at 100°C with citrate for 20 minutes. Primary antibody was incubated at 1/80 dilution for 20 minutes at 25°C. A HRP conjugated anti-mouse IgG was used as a secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C4d antibody (ab36075)

This image is courtesy of an Abreview submitted by Ronald Houston.

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