




Product datasheet

Anti-C4 α antibody ab231090

2 Images

Overview

Product name	Anti-C4a antibody
Description	Rabbit polyclonal to C4a
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Rat, Recombinant fragment Predicted to work with: Mouse 
Immunogen	Recombinant fragment (His-tag) corresponding to Mouse C4a aa 650-800. (N-terminal His-tag and GST-tag. Expressed in E.coli). Database link: B9EIU2 <div>  Run BLAST with  Run BLAST with </div>
Positive control	WB: Recombinant mouse C4A protein: Rat serum. IHC-P: ??? ??? tissue.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 44.12% PBS, 55.77% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Purification notes	ab231090 was purified by antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab231090 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
WB		Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 194 kDa.

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

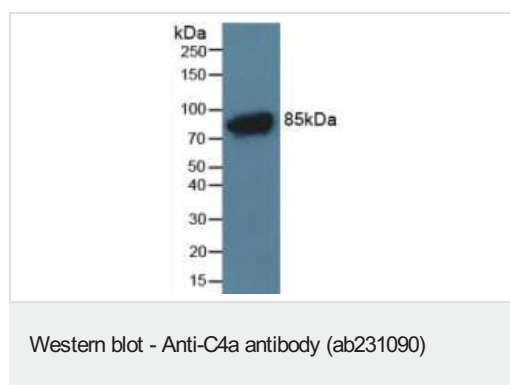
Prior to secretion, the single-chain precursor is enzymatically cleaved to yield the non-identical chains (alpha, beta and gamma). During activation, the alpha chain is cleaved by C1 into C4a and C4b, and C4b stays linked to the beta and gamma chains. Further degradation of C4b by C1 into the inactive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

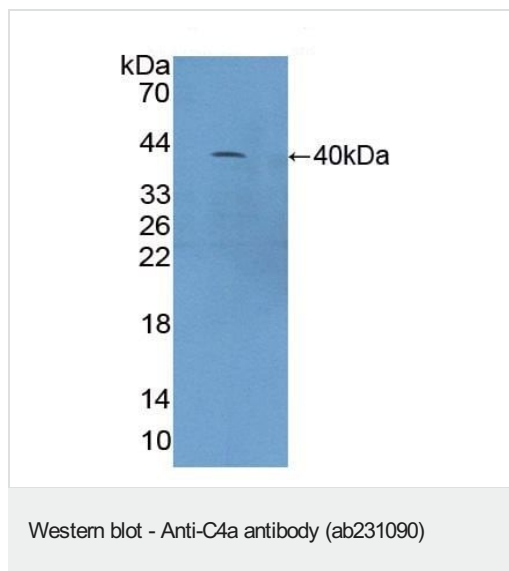


Anti-C4a antibody (ab231090) at 2 µg/ml + Rat serum

Secondary

HRP-Linked Guinea pig anti-Rabbit at 1/2000 dilution

Predicted band size: 194 kDa



Anti-C4a antibody (ab231090) at 2 µg/ml + Recombinant mouse C4A

Secondary

HRP-Linked Guinea pig anti-Rabbit at 1/2000 dilution

Predicted band size: 194 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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