

Product datasheet

Anti-C1q antibody [4.8] ab182451

KO VALIDATED Recombinant RabMAB

★★★★☆ [5 Abreviews](#) [34 References](#) [2 Images](#)

Overview

Product name	Anti-C1q antibody [4.8]
Description	Rabbit monoclonal [4.8] to C1q
Host species	Rabbit
Tested applications	Suitable for: IHC-FoFr
Species reactivity	Reacts with: Mouse
Immunogen	Full length native protein (purified) corresponding to Mouse C1q.
Positive control	IHC: Mouse brain tissue (adult) .
General notes	<p>This antibody was developed as part of a collaboration between Abcam and the lab of Ben A. Barres at Stanford University:</p> <p>Alexander H. Stephan et al. , A Dramatic Increase of C1q Protein in the CNS during Normal Aging ,The Journal of Neuroscience.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</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: 7.2 Preservative: 0.01% Sodium azide Constituent: 99% PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number	4.8
Isotype	IgG

Applications

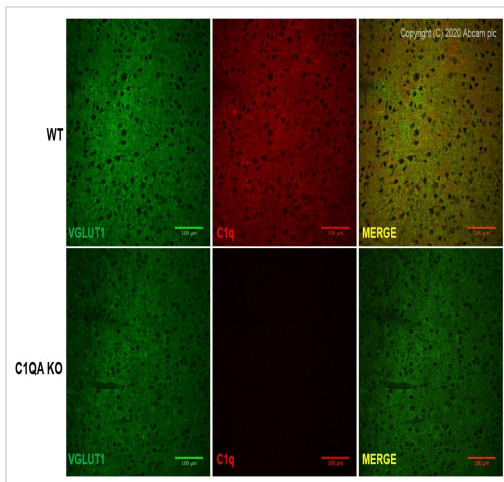
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab182451 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-FoFr	★★★★★ (1)	Use a concentration of 1 µg/ml. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target

Function	C1q associates with the proenzymes C1r and C1s to yield C1, the first component of the serum complement system. The collagen-like regions of C1q interact with the Ca(2+)-dependent C1r(2)C1s(2) proenzyme complex, and efficient activation of C1 takes place on interaction of the globular heads of C1q with the Fc regions of IgG or IgM antibody present in immune complexes.
Involvement in disease	Defects in C1QA are a cause of complement component C1q deficiency (C1QD) [MIM:613652]. A rare defect resulting in C1 deficiency and impaired activation of the complement classical pathway. C1 deficiency generally leads to severe immune complex disease with features of systemic lupus erythematosus and glomerulonephritis.
Sequence similarities	Contains 1 C1q domain. Contains 1 collagen-like domain.
Post-translational modifications	O-linked glycans consist of Glc-Gal disaccharides bound to the oxygen atom of post-translationally added hydroxyl groups.
Cellular localization	Secreted.

Images



ab182451 (1/500) staining C1q in 15μm coronal brain sections from postnatal day 90 C1qA KO mice and WT litter-mates (Botto *et al.*, 1998) by immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with 4% paraformaldehyde and permeabilized with 0.3% Triton. An Alexa Flour-conjugated Goat anti-Mouse IgG polyclonal (1/500) was used as the secondary antibody. Positive staining on wild type (WT) mouse cerebral cortex, and no staining on knockout (KO) mouse cerebral cortex.

Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-C1q antibody [4.8] (ab182451)

This image is kindly provided by Dr. Daniel Wilton from Boston Children's Hospital.

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-C1q antibody [4.8] (ab182451)

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

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