abcam

Product datasheet

Anti-C1q antibody [4.8] - Low endotoxin, Azide free ab227072

KO VALIDATED Recombinant RabMAb

6 References 2 Images

Overview

Product name	Anti-C1q antibody [4.8] - Low endotoxin, Azide free
Description	Rabbit monoclonal [4.8] to C1q - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-Fr
Species reactivity	**Reacts with:** Mouse
Immunogen	Full length native protein (purified).
Positive control	IHC-Fr: Mouse brain tissue (adult) .
General notes	ab227072 is the carrier-free version of **ab182451**. This antibody was developed as part of a collaboration between Abcam and the lab of Ben A. Barres at Stanford University: Alexander H. Stephan et al., A Dramatic Increase of C1q Protein in the CNS during Normal Aging ,The Journal of Neuroscience. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	4.8
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227072 in the following tested applications.

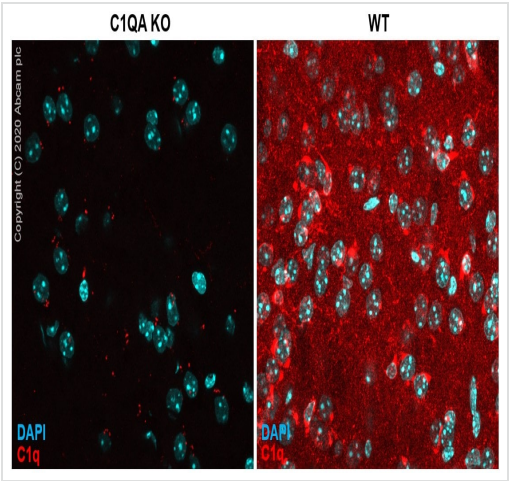
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration. **ab199376** - 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



Immunohistochemistry (Frozen sections) - Anti-C1q antibody [4.8] - Low endotoxin, Azide free (ab227072)

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

Immunohistochemistry (Frozen sections) analysis of 15 µm coronal brain sections from postnatal day 90 C1qA knockout mice and wild-type litter-mates (Botto *et al.*, 1998) labeling C1q with ab227072 at 1/500 dilution. Tissues fixed with 4% paraformaldehyde, and permeabilized using 0.3% triton. Goat anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/500 dilution was used as the secondary antibody (red). Nuclei counterstained with DAPI (teal).

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