

## Product datasheet

# Anti-C1q antibody [7H8] - BSA and Azide free ab255973

Recombinant

2 Images

### Overview

<b>Product name</b>	Anti-C1q antibody [7H8] - BSA and Azide free
<b>Description</b>	Rat monoclonal [7H8] to C1q - BSA and Azide free
<b>Host species</b>	Rat
<b>Specificity</b>	Immunization schedule and immunogen used has been described in the following article: Wasiliu, M et al; Monoclonal antibodies to complement components without the need of their prior purification. I. Antibodies to mouse C1q. Hybridoma 1989, 8 (6): 615.
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, ICC/IF, IHC-FoFr, IHC-Fr <b>Unsuitable for:</b> IHC-P or WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-Fr: P90 Wild-type mouse.
<b>General notes</b>	<p>ab255973 is the carrier-free version of <a href="#">ab11861</a>.</p> <p>This product was switched from a hybridoma to a recombinant production format on 25th October 2021.</p> <p>Our <b>carrier-free</b> 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.</p> <p>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.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p>

## Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	7H8
Isotype	IgG1
Light chain type	kappa

## Applications

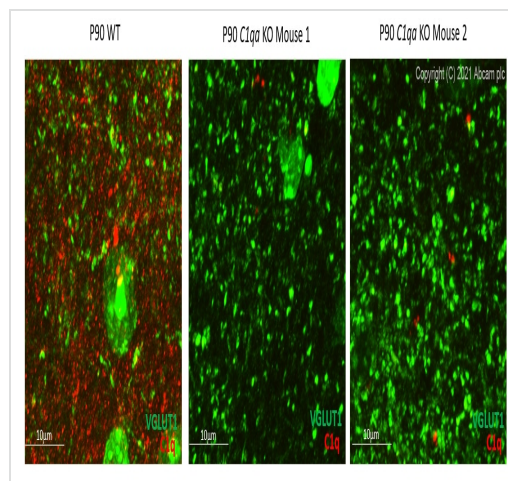
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab255973 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-FoFr		Use at an assay dependent concentration.
IHC-Fr		1/500.

**Application notes** Is unsuitable for IHC-P or WB.

## 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.



Immunohistochemistry (Frozen sections) - Anti-C1q antibody [7H8] - BSA and Azide free (ab255973)

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

This data was developed using **ab11861** the same antibody clone in a different buffer formulation.

Positive staining on P90 Wild-type mouse, and no staining on P90 C1qa Knockout Mouse . Primary antibody was applied at a dilution of 1/500 and anti-VGLUT1 antibody. Secondary antibodies including goat anti rabbit IgG (H+L) highly cross-adsorbed Alexa Fluor 594 and goat anti guinea pig IgG (H+L) highly cross-adsorbed Alexa Fluor 488 were also employed at a dilution of 1/500.

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 [7H8] - BSA and Azide free (ab255973)

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

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