abcam

ab4223

FITC Anti-C1q antibody

Anti-C1q antibody conjugated to FITC is a rabbit polyclonal antibody suitable for flow cytometry, ICC, IHC-P, and reacts with human samples.

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 1% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Native Full Length Protein corresponding to Human C1QA. Database link P02745
Purity	IgG fraction
Purification notes	Traces of contaminating antibodies have been removed by solid phase absorption with human plasma proteins.

Reactivity data

ICC

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Expected

Species	Human
Dilution info	-
Notes	ab37406 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

IHC-P

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information C1QA

Function

Core component of the complement C1 complex, a multiprotein complex that initiates the classical pathway of the complement system, a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:12847249, PubMed:19006321, PubMed:24626930, PubMed:29449492, PubMed:3258649, PubMed:34155115, PubMed:6249812, PubMed:6776418). The classical complement pathway is initiated by the C1Q subcomplex of the C1 complex, which specifically binds IgG or IgM immunoglobulins complexed with antigens, forming antigen-antibody complexes on the surface of pathogens: C1QA, together with C1QB and C1QC, specifically recognizes and binds the Fc regions of IgG or IgM via its C1q domain (PubMed:12847249, PubMed:19006321, PubMed:24626930, PubMed:29449492, PubMed:3258649, PubMed:6776418). Immunoglobulin-binding activates the proenzyme C1R, which cleaves C1S, initiating the proteolytic cascade of the complement system (PubMed:29449492). The C1Q subcomplex is activated by a hexamer of IgG complexed with antigens, while it is activated by a pentameric IgM (PubMed:19706439, PubMed:24626930, PubMed:29449492). The C1Q subcomplex also recognizes and binds phosphatidylserine exposed on the surface of cells undergoing programmed cell death, possibly promoting activation of the complement system (PubMed:18250442).

Storage

Shipped at conditions Blue Ice

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

What is this antibody validated in?
FITC Anti-C1q antibody (ab4223) is a rabbit polyclonal antibody and is validated for use in Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P) in Human samples.

Trusted by the scientific community
Anti-C1q FITC (ab4223) was first used in a scientific publication in 2003 and has been cited over 10 times in peer-reviewed journals.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

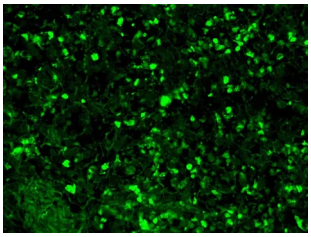
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

2 product images



Immunocytochemistry - FITC Anti-C1q antibody (ab4223)

C1q Immunocytochemistry staining using rabbit Anti-C1q antibody

C1q isolated from the NHS. This antibody reacts with the Human C1q complement. Traces of contaminating antibodies have been removed by solid phase absorption with human plasma proteins. This antibody is well suited for tissue section staining but may also be used for other applications.

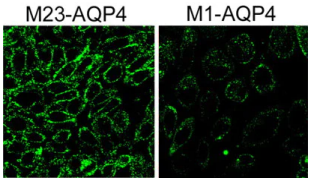


Image from Phuan PW et al., J Biol Chem. 2012 Apr 20;287(17):13829-39. Epub 2012 Mar 5. Fig 7.; doi: 10.1074/jbc.M112.344325; April 20, 2012, The Journal of Biological Chemistry, 287, 13829-13839.

Immunocytochemistry - FITC Anti-C1q antibody (ab4223)

ab4223, staining C1q in CHO-K1 cells transfected with M1-AQP4 or M23-AQP4 by Immunocytochemistry/ Immunofluorescence.

Cells were incubated at room temperature with recombinant monoclonal NMO antibody and 120 µg/ml human C1q protein (ab96363). Cells were washed with PBS, fixed in paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were blocked with 1% BSA for 30 min and incubated for 60 min with primary antibody against C1q (ab4223) at 1/200 dilution.

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