

Anti-Human C1q – FITC

Clone: Polyclonal

REFERENCES AND PRESENTATIONS

- **concentrated**
MAD-165759QF-1
(1:10 – 1:50 Recommended Dilution)

COMPOSITION

Anti-human Sheep Antibody to C1q. Fluorescein Conjugated Polyclonal antibody purified from serum and prepared in buffer with carrier protein and preservative for stabilization.

INTENDED USE: Immunofluorescence (IF) on frozen tissue sections. Not tested on paraffin sections or Western-Blotting.

CLONE: Polyclonal (identified in the batch field of the product label)

Ig ISOTYPE: Polyclonal IgG.

IMMUNOGEN: Human C1q, purified from plasma.

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS: 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.

C1q is predominantly produced by macrophages but also by follicular dendritic cells, interdigitating cells and cells of the monocyte-macrophage lineage. C1q deficiency has a profound effect on host defence and clearance of immune complexes. Absence of C1q may cause autoimmunity by impairment of the clearance of apoptotic cells. Inherited C1q deficiency is also associated with the development of systemic lupus erythematosus (SLE).

This antibody should be used in conjunction with a panel of antibodies to aid in the identification of C1q fragment in target tissue (e.g., in the diagnosis of renal or dermal pathologies).

The interpretation of the results should be always corroborated with those of external controls and integrated with the morphological and clinical aspects for the final diagnosis.

POSITIVE CONTROL: Normal kidney, skin

EXTERNAL NEGATIVE CONTROL:

Tissue sample homologous to the test sample

incubated with an antibody isotype not specific for C1q-FITC

VISUALIZATION: membranous and secreted

IF recommended procedure:

- **Type of sample:** Antibodies can be used with direct immunofluorescence techniques on tissue cryostat sections.
- **Recommended dilution:** 1/10-1/50 and 30-60 minutes of incubation at room temperature using a humid incubation chamber in the dark. *However, optimal dilution for specific applications must be determined by each laboratory.*
- **Preparation of the sample:**
- Air-dry the cryostat sections taken on charged slides and fix them in acetone at 4 °C for 10 minutes.
Note: If you do not continue with the staining, keep then in the freezer.
- If you continue with the staining, after the fixation in acetone, air-dry again.
- Once the technique is started, keep the sections moist with TBS washing solution.
- Remove the TBS and incubate the sample with the antibody for 30-60 minutes with enough volume to cover the tissue section with the conjugated antibody.
The optimal protocol for specific applications must be determined by each laboratory.
- **Visualization of immunostaining:** Antibodies conjugated to FITC have a maximum absorption at 490 nm and absorption of 520 nm (apple green color) so their observation must be performed in a fluorescence microscope equipped with appropriate filters and in the dark.

STORAGE AND STABILITY:  See the expiration date printed on product label.

 Stored at 2-8 °C in the dark.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.



SAFETY RECOMMENDATIONS

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY

1. Bancroft JD. Theory and Practice of Histological Techniques. Churchill-Livingstone. 5ªed. pp 579-591 (2002).
2. Hwang, H.Y. et al. (2008) Highly specific inhibition of C1q globular-head binding to human IgG: a novel approach to control and regulate the classical complement pathway using an engineered single chain antibody variable fragment. Mol Immunol. 45: 2570-80.
3. Cragg, M.S. and Glennie, M.J. (2004) Antibody specificity controls in vivo effector mechanisms of anti-CD20 reagents. Blood. 103: 2738-43.
4. Sárvári, M. et al. (2003) Inhibition of C1q-beta-amyloid binding protects hippocampal cells against complement mediated toxicity. J Neuroimmunol. 137: 12-8.
5. Lewis, M.J. et al. (2008) The different effector function capabilities of the seven equine IgG subclasses have implications for vaccine strategies. Mol Immunol. 45: 818-27.
6. Yuste, J. et al. (2007) Serum amyloid P aids complement-mediated immunity to Streptococcus pneumoniae. PLoS Pathog. 3: 1208-19.
7. Tang, Z. et al. (2013) A human single-domain antibody elicits potent antitumor activity by targeting an epitope in mesothelin close to the cancer cell surface. Mol Cancer Ther. 12: 416-26.

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet
	Keep away from sunlight

