

C1QA Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7324b**Specification**

C1QA Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	P02745
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	26017
Antigen Region	198-227

C1QA Antibody (C-term) - Additional Information**Gene ID** 712**Other Names**

Complement C1q subcomponent subunit A, C1QA

Target/Specificity

This C1QA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 198-227 amino acids from the C-terminal region of human C1QA.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

C1QA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

C1QA Antibody (C-term) - Protein Information**Name** C1QA {ECO:0000303|PubMed:1706597, ECO:0000312|HGNC:HGNC:1241}

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](#)).

Cellular Location

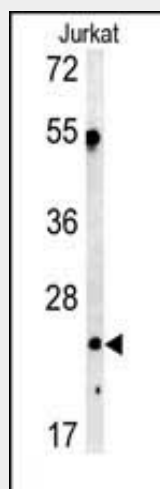
Secreted. Cell surface. Note=Specifically binds IgG or IgM immunoglobulins complexed with antigens, forming antigen-antibody complexes on the surface of pathogens.

C1QA Antibody (C-term) - Protocols

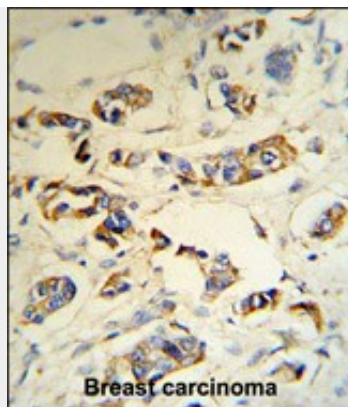
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

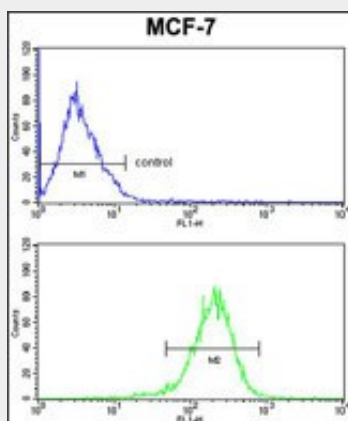
C1QA Antibody (C-term) - Images



Western blot analysis of C1QA antibody (C-term) (Cat.#AP7324b) in Jurkat cell line lysates (35ug/lane). C1QA (arrow) was detected using the purified Pab.



C1QA Antibody (C-term) (RB18692) IHC analysis in formalin fixed and paraffin embedded human breast carcinoma tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the C1QA Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



C1QA Antibody (C-term) (Cat.#AP7324b) FC analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

C1QA Antibody (C-term) - Background

C1QA is a major constituent of the human complement subcomponent C1q. C1q associates with C1r and C1s in order to yield the first component of the serum complement system. Deficiency of C1q has been associated with lupus erythematosus and glomerulonephritis. C1q is composed of 18 polypeptide chains: six A-chains, six B-chains, and six C-chains. Each chain contains a collagen-like region located near the N terminus and a C-terminal globular region. The A-, B-, and C-chains are arranged in the order A-C-B on chromosome 1.

C1QA Antibody (C-term) - References

- Dardiotis,E., Koutsou,P. J. Neurol. Sci. (2009) In press
- Martens,H.A., Zuurman,M.W. Ann. Rheum. Dis. 68 (5), 715-720 (2009)
- Racila,E., Link,B.K. Clin. Cancer Res. 14 (20), 6697-6703 (2008)
- Sjoberg,A.P., Nystrom,S. Mol. Immunol. 45 (11), 3213-3221 (2008)