

C1QB Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8893a

Specification

C1QB Antibody (N-term) - Product Information

FC, WB, E Application **Primary Accession** P02746 Reactivity Human Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 26722 Antigen Region 55-81

C1QB Antibody (N-term) - Additional Information

Gene ID 713

Other Names

Complement C1q subcomponent subunit B, C1QB

Target/Specificity

This C1QB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-81 amino acids from the N-terminal region of human C1QB.

Dilution

FC~~1:10~50 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 purified through a protein A column, followed by peptide affinity purification.

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

C1QB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

C1QB Antibody (N-term) - Protein Information

Name C1QB {ECO:0000303|PubMed:3000358, ECO:0000312|HGNC:HGNC:1242}

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

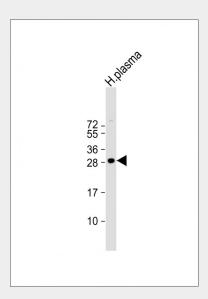
Secreted. Cell surface. Note=Specifically binds IgG or IgM immunoglobulins complexed with antigens, forming antigen-antibody complexes on the surface of pathogens.

C1QB Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

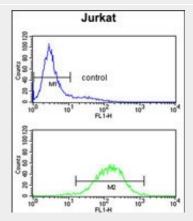
C1QB Antibody (N-term) - Images



Anti-C1QB Antibody (N-term) at 1:1000 dilution + human plasma lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.



Predicted band size: 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



C1QB Antibody (N-term) (Cat. #AP8893a) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

C1QB Antibody (N-term) - Background

C1QB 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.

C1QB Antibody (N-term) - References

Reid,K.B. et.al., Biochem. J. 173 (3), 863-868 (1978) Reid,K.B. et.al., Biochem. J. 179 (2), 367-371 (1979)