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C1QB Antibody

Rabbit mAb
Catalog # AP91652

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P02746
Reactivity	Human
Clonality	Monoclonal
Other Names	C1qb; Complement component 1 q subcomponent B chain;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	26722

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human C1QB
Description	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 Ca2+-dependent C1r2C1s2 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

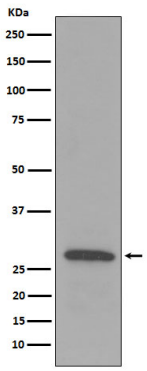
Name	C1QB {ECO:0000303|PubMed:3000358, ECO:0000312|HGNC:HGNC:1242}
Function	Core component of the complement C1 complex, a multiprotein complex that initiates the classical pathway of the complement system, a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that 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.

Images



Western blot analysis of C1QB expression in Human plasma lysate.

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