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Anti-C1q Reference Antibody (ANX005)

Recombinant Antibody
Catalog # APR10670

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P02745
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2
Calculated MW	26017

Additional Information

Target/Specificity	C1q
Endotoxin Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

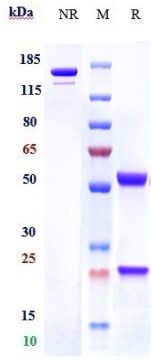
Name	C1QA {ECO:0000303|PubMed:1706597, ECO:0000312|HGNC:HGNC:1241}
Function	Core component of the complement C1 complex, a multiprotein complex that initiates the classical pathway of the complement system, a cascade of proteins that leads to phagocytosis and breakdown of pathogens and signaling that 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).

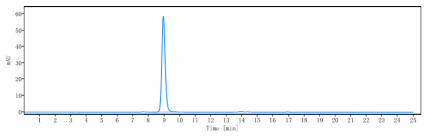
Cellular Location

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

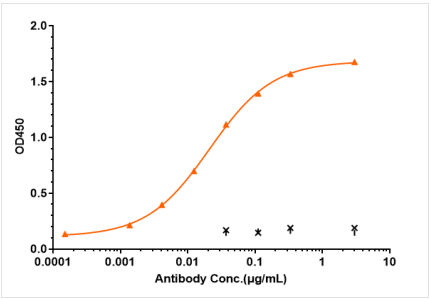
Images



Anti-C1q Reference Antibody (ANX005) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-C1q Reference Antibody (ANX005) is 100%, determined by SEC-HPLC.



Immobilized Human C1q, Fc Tag at 2 μg/mL can bind Anti-C1q Reference Antibody (ANX005), EC50=0.02111 ug/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.