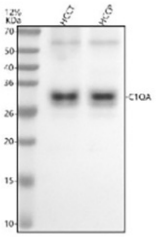
C1QA Antibody / Complement component 1 subcomponent subunit A [clone 31C57] (FY12522)

Catalog No.	Formulation	Size
FY12522	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31C57
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P02745
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200
Limitations	This C1QA antibody is available for research use only.



Western blot analysis of C1QA using anti-C1QA antibody. Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human HCCT whole cell lysates, Lane 2: human HCCP whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-C1QA antibody at 1:500 overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for C1QA at approximately 28 kDa. The expected molecular weight of C1QA is ~28 kDa.

Description

C1QA antibody detects complement component 1 subcomponent subunit A, encoded by the C1QA gene. C1QA is one of three chains (A, B, and C) that assemble to form the C1q protein complex, a recognition unit of the classical complement pathway. C1q binds to antibodies or immune complexes, initiating complement activation and promoting clearance of pathogens and apoptotic cells. Through these roles, C1QA is central to innate immunity and host defense.

C1QA antibody is commonly used in immunology, inflammation, and autoimmune disease research. C1QA expression is highest in monocytes, macrophages, and dendritic cells. It functions as a pattern recognition receptor that bridges innate and adaptive immunity. By detecting C1QA, researchers can study activation of complement pathways and regulation of immune responses.

In western blot assays, C1QA antibody detects protein bands of expected size in immune cell extracts. Immunohistochemistry highlights strong expression in macrophages and tissue resident immune cells. Immunofluorescence enables visualization of C1QA in immune synapses and complement activation sites. ELISA supports quantification of circulating C1QA in biological samples.

Deficiency of C1QA is associated with autoimmune disorders such as systemic lupus erythematosus, underscoring its importance in self tolerance and immune clearance. Elevated expression of C1QA has been linked to chronic inflammation and neurodegenerative diseases, including Alzheimer disease, where complement activation contributes to pathology. By applying C1QA antibody, scientists can investigate how alterations in complement regulation affect health and disease.

C1QA antibody from NSJ Bioreagents offers reliable specificity for complement research. Its performance across methods ensures accurate detection of this key immune recognition protein.

Application Notes

Optimal dilution of the C1QA antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human C1QA was used as the immunogen for the C1QA antibody.

Storage

Store the C1QA antibody at -20oC.

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