

Complement Component 1, Q Subcomponent A (C1qA) Active Protein | C1qA active protein

Active Complement Component 1, Q Subcomponent A (C1qA)

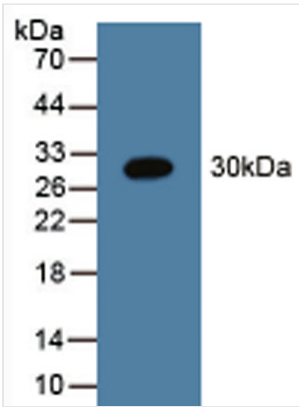
CATALOG # AAA149262	HOST E. coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

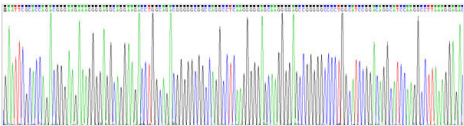
Complement Component 1; Q Subcomponent A (C1qA); Active Complement Component 1; q Subcomponent; Alpha Polypeptide; C1qA active protein

PRODUCT SPECIFICATIONS

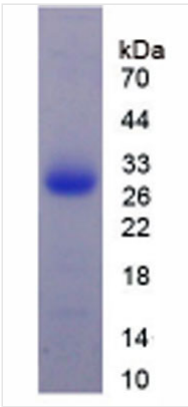
Host	E. coli
Purity/Purification	>90%
Form/Format	PBS, pH 7.4, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 250 ug/mL (varies by lot)
Applicable Applications for C1qA active protein	Activity Assay, Cell Culture
Source	Prokaryotic expression
Residues	Ala28~Ala245
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Predicted isoelectric point	9.6
Usage	Reconstitute in ddH2O to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



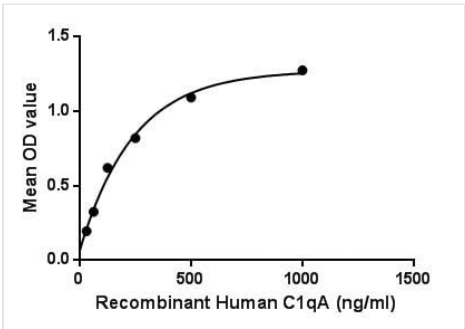
WB (Western Blot)
Sample: Recombinant C1qA, Human;Antibody: Rabbit Anti-Human C1qA Ab



Gene Sequencing
Figure 2. Gene Sequencing (extract)



SDS-PAGE
Sample: Active recombinant C1qA, Human



Bioactivity
Figure. The binding activity of C1qA with CRP. The complement component 1q (C1q) is composed of 18 polypeptide chains: six A-chains, six B-chains, and six C-chains. Complement Component 1, Q Subcomponent A (C1qA) is six A-chains of C1q. Complement component 1q (C1q) is a protein complex involved in the complement system, which is part of the innate immune system. C1q together with C1r and C1s form the C1 complex. It is potentially multivalent for attachment to the complement fixation sites of immunoglobulin. The sites are on the CH2 domain of IgG and, it is thought, on the CH4 domain of IgM. IgG4 cannot bind C1q, but the other three IgG types can. Besides, C Reactive Protein (CRP) has been identified as an interactor of C1qA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human C1qA and recombinant human CRP. Briefly, C1qA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to CRP-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-C1qA pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of C1qA and CRP was shown in Figure 1, and this effect was in a dose dependent manner.

APD GKKGEAGPPG RRGRPLKGE
QGEPGAPGIR TGIQGLKGDQ GEPGSGNPG KVGYPGSPGP LGARGIPGIK
GTKGSPGNIK DQPPAFSAI RNPPNAGGNV VIFDTVITNQ EEPYQNHSGR
FVCTVPGYYY FTFQVLSQWE ICLSIIVSSSR GQVRRSLGFC DTTNKGLFQV
VSGGMVLQLQ QGDQVHVEKD PKKGHIYQGS EADSVFSGFL IFPSA

Sequence

ADDITIONAL INFORMATION

Product Categories/Family for C1qA active protein	Immune molecule
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NCBI AND UNIPROT INFORMATION

NCBI GI #	7705753
NCBI GeneID	712

NCBI GenBank Nucleotide #	NM_015991.4
Molecular Weight	Predicted Molecular Mass: 26.8kDa Accurate Molecular Mass: 30kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	complement C1q subcomponent subunit A
NCBI Official Synonym Full Names	complement C1q A chain
NCBI Official Symbol	C1QA
NCBI Protein Information	complement C1q subcomponent subunit A
UniProt Protein Name	Complement C1q subcomponent subunit A
UniProt Gene Name	C1QA
UniProt Entry Name	C1QA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/complement-component-1-q-subcomponent-a-c1qa/149262>