

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

Active Complement Component 1, Q Subcomponent A (C1qA)

CATALOG # AAA161911	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	-----------------------	---

PRODUCT SYNONYMS

Complement Component 1; Q Subcomponent A (C1qA); Active Complement Component 1; Q Subcomponent A; q Subcomponent; Alpha Polypeptide4; C1qA active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Glu23~Ala2 45
Applicable Applications for C1qA active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	9.6
Research Area	Immune molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

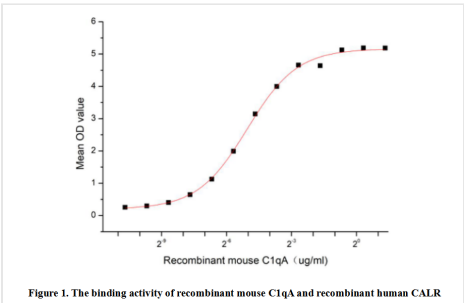


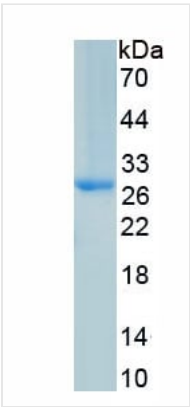
Figure 1. The binding activity of recombinant mouse C1qA and recombinant human CALR

Bioactivity

Complement Component 1, Q Subcomponent A (C1qA) is a protein that plays a crucial role in the innate immune system. It is part of the C1 complex, which is the first component of the classical complement pathway. The C1 complex is composed of one molecule each of C1q, C1r, and C1s. C1q is the recognition subcomponent of the complex and initiating the complement cascade. C1qA plays a key role in eliminating pathogens, regulating inflammatory response and maintaining immune tolerance. It is reported that C1qA can bind to the C-terminal of CALR through its gelatin-as-region, and this interaction may play an important role in regulating complement activation and cell signaling. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse C1qA and recombinant human CALR. Briefly, C1qA was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CALR-coated microtiter wells and incubated for 1h 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 for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant mouse C1qA and recombinant human CALR was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for C1qA active protein	Active proteins
---	-----------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	124286805
NCBI GeneID	12259
NCBI Accession #	NP_031598.2
NCBI GenBank Nucleotide #	NM_007572.2
UniProt Accession #	P98086; Q9DCM6
Molecular Weight	25,974 Da
NCBI Official Full Name	complement C1q subcomponent subunit A
NCBI Official Synonym Full Names	complement component 1, q subcomponent, alpha polypeptide
NCBI Official Symbol	C1qa
NCBI Official Synonym Symbols	C1q; A1255395
NCBI Protein Information	complement C1q subcomponent subunit A
UniProt Protein Name	Complement C1q subcomponent subunit A
UniProt Gene Name	C1qa
UniProt Entry Name	C1QA_MOUSE

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/complement-component-1-q-subcomponent-a-c1qa/161911>