

Complement Component 4a (C4a) Active Protein | C4a active protein

Active Complement Component 4a (C4a)

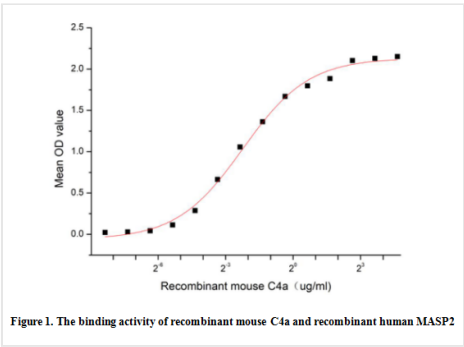
CATALOG # AAA161729	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Complement Component 4a (C4a); Active Complement Component 4a (C4a); Complement Component 4a; C4a anaphylatoxin4; C4a active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Asn678~Arg 753
Applicable Applications for C4a 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	9.5
Research Area	Immune molecule, Endocrinology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

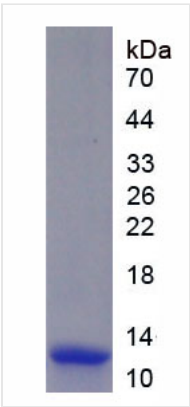


Bioactivity

Complement Component 4a (C4a) is a component of the complement system, which is a cleavage product of the complement C4 protein. C4a has been implicated in various inflammatory and immune responses. It acts as a chemoattractant, recruiting immune cells such as neutrophils and macrophages to the site of inflammation. Additionally, C4a can stimulate the release of pro-inflammatory cytokines and chemokines, further amplifying the immune response. Besides, the binding of MASP2 to C4a is an important step in the lectin pathway of the complement system, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse C4a and recombinant human MASP2. Briefly, C4a was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to MASP2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-C4a 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 C4a and recombinant human MASP2 was shown in Figure 1, the EC50 for this effect is 0.21 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for C4a active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

UniProt Accession #	B9EIU2
Molecular Weight	12kDa
UniProt Protein Name	C4a protein
UniProt Gene Name	C4a

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-4a-c4a/161729>