

Complement Component 5 (C5) Active Protein | C5 active protein

Active Complement Component 5 (C5)

CATALOG # AAA161871	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Complement Component 5 (C5); Active Complement Component 5 (C5); Complement Component 5; CPAMD4; C5a anaphylatoxin; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 44; C5 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	Ser1055~As n1513
Applicable Applications for C5 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.4
Research Area	Metabolic pathway, Infection immunity, Immune molecule, Hematology, Autoimmunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

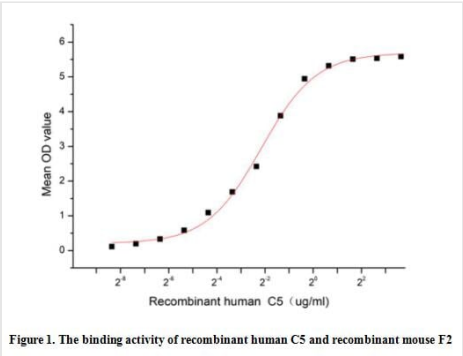
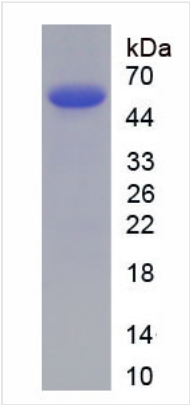


Figure 1. The binding activity of recombinant human C5 and recombinant mouse F2



SDS-PAGE

Figure. SDS-PAGE

Bioactivity

Complement Component 5 (C5), which forms part of the later stages of the complement pathway, is cleaved into C5a and C5b. C5a is a chemotactic agent for neutrophils, while C5b forms part of the complement membrane attack complex. Coagulation Factor II (F2) has been identified as an interactor of C5, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C5 and recombinant mouse F2. Briefly, C5 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to F2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-C5 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 human C5 and recombinant mouse F2 was shown in Figure 1, the EC50 for this effect is 0.22 ug/mL.

ADDITIONAL INFORMATION

Product Categories/Family for C5 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	119607886
NCBI GeneID	727
UniProt Accession #	P01031; Q14CJ0; Q27I61
Molecular Weight	188,305 Da
NCBI Official Full Name	complement component 5
NCBI Official Synonym Full Names	complement component 5
NCBI Official Symbol	C5
NCBI Official Synonym Symbols	C5a; C5b; CPAMD4
NCBI Protein Information	complement C5; prepro-C5; C5a anaphylatoxin; anaphylatoxin C5a analog; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4
UniProt Protein Name	Complement C5
UniProt Gene Name	C5
UniProt Synonym Gene Names	CPAMD4
UniProt Entry Name	CO5_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.

