

Complement C4-B (C4B) Active Protein | C4B active protein

Active Complement C4-B (C4B)

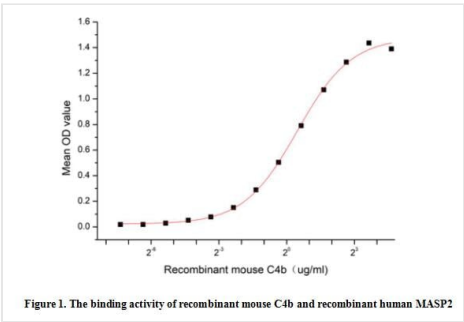
CATALOG # AAA161840	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Complement C4-B (C4B); Active Complement C4-B (C4B); Complement C4-B; CO4; CPAMD3; Basic complement C4; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 3; Complement component 4B; Chido blood group4; C4B active protein

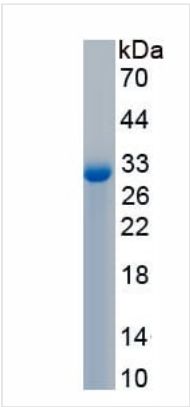
PRODUCT SPECIFICATIONS

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	Gln126~Ser 366
Applicable Applications for C4B 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	8.7
Research Area	Metabolic pathway, Infection immunity, Immune molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Complement Component 4b (C4b) is a component of the complement system, which is activated by the recognition of foreign pathogens, such as bacteria and viruses, or altered self-cells. In the classical activation pathway of complement, C4b is produced by the proteolytic cleavage of the precursor protein C4 by the activated enzyme C1s, and it can bind to C2a to form C3 invertase (C4b2a) which is responsible for the cleavage of C3. Besides, the binding of MASP2 to C4b 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 C4b and recombinant human MASP2. Briefly, C4b 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-C4b 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 C4b and recombinant human MASP2 was shown in Figure 1, the EC50 for this effect is 1.39 ug/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for C4B active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	157951698
NCBI GeneID	12268
NCBI Accession #	NP_033910.2
NCBI GenBank Nucleotide #	NM_009780.2
UniProt Accession #	P01029; O70346; Q31201; Q3TYY1; Q3TZC9; Q61372; Q61859; Q62353; Q6NWW8; E9QKK7
NCBI Official Full Name	complement C4-B
NCBI Official Synonym Full Names	complement component 4B (Chido blood group)
NCBI Official Symbol	C4b
NCBI Official Synonym Symbols	C4; Ss
NCBI Protein Information	complement C4-B; complement component 4 (within H-2S); complement component 4B (Childo blood group)
UniProt Protein Name	Complement C4-B
UniProt Gene Name	C4b
UniProt Synonym Gene Names	C4
UniProt Entry Name	CO4B_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-c4-b-c4b/161840>