

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

Active Complement C4-B (C4B)

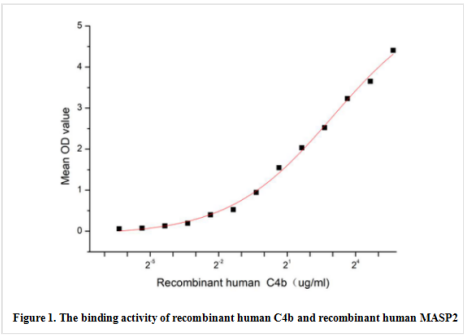
CATALOG # AAA161839	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

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

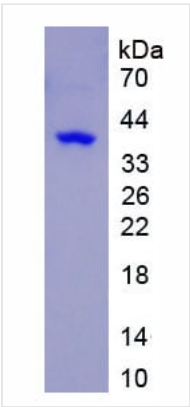
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Gln19~Leu3 33
Applicable Applications for C4B 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	9.4
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 human 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 human 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 #	178557739
NCBI GeneID	721
NCBI Accession #	NP_001002029.3
NCBI GenBank Nucleotide #	NM_001002029.3
UniProt Accession #	P0C0L5; P01028; P78445; Q13160; Q13906; Q14033; Q14835; Q6U2E9; Q6U2G1; Q6U2I5; Q6U2L1; A2BHY4
Molecular Weight	192,751 Da
NCBI Official Full Name	complement C4-B preproprotein
NCBI Official Synonym Full Names	complement component 4B (Chido blood group)
NCBI Official Symbol	C4B
NCBI Official Synonym Symbols	CH; C4F; CO4; C4B1; C4B2; C4B3; C4B5; C4BD; C4B12; C4B_2; CPAMD3
NCBI Protein Information	complement C4-B; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 3; Chido form of C4; basic complement C4; complement C4B1a
UniProt Protein Name	Complement C4-B
UniProt Gene Name	C4B
UniProt Synonym Gene Names	CO4; CPAMD3

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-c4-b-c4b/161839>