

## Complement Component 8b (C8b) Active Protein | C8b active protein

Active Complement Component 8b (C8b)

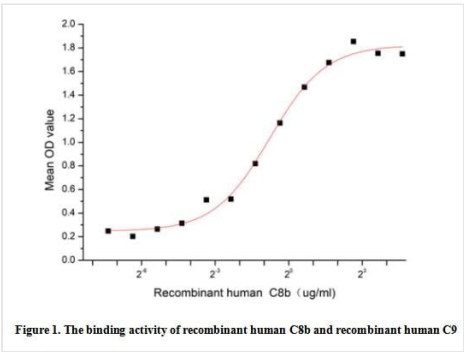
|                               |                       |                                                     |
|-------------------------------|-----------------------|-----------------------------------------------------|
| CATALOG #<br><b>AAA161841</b> | HOST<br><b>E Coli</b> | APPLICATIONS<br><b>Activity Assay, Cell Culture</b> |
|-------------------------------|-----------------------|-----------------------------------------------------|

### PRODUCT SYNONYMS

Complement Component 8b (C8b); Active Complement Component 8b (C8b); Complement Component 8b; Complement component 8 subunit beta4; C8b 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                                       | Cys162~His 504                                                                               |
| Applicable Applications for C8b 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                              | 7.3                                                                                          |
| Research Area                                  | Signal transduction, Immune molecule, Rheumatology                                           |
| Preparation and Storage                        | Store at 2-8 degree C for one month, -80 degree C for 12 months                              |

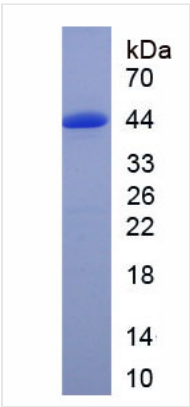


Bioactivity

Complement Component 8b (C8b), one of the three subunits of the complement component 8 (C8) protein, has only been identified in vertebrates. C8 is one of the five components (C5b, C6, C7, C8 and C9) that interact to form the MAC that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. Besides, C9 can interact with C8b, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C8b and recombinant human C9. Briefly, C8b was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to C9-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-C8b 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 C8b and recombinant human C9 was shown in Figure 1, the EC50 for this effect is 0.59 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

|                                                  |                 |
|--------------------------------------------------|-----------------|
| Product Categories/Family for C8b active protein | Active proteins |
|--------------------------------------------------|-----------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                         |
|----------------------------------|-------------------------------------------------------------------------|
| NCBI GI #                        | 514239920                                                               |
| NCBI GeneID                      | 732                                                                     |
| NCBI Accession #                 | NP_001265473.1                                                          |
| NCBI GenBank Nucleotide #        | NM_001278544.1                                                          |
| UniProt Accession #              | P07358; A1L4K7                                                          |
| Molecular Weight                 | 67,047 Da                                                               |
| NCBI Official Full Name          | complement component C8 beta chain isoform 3                            |
| NCBI Official Synonym Full Names | complement component 8, beta polypeptide                                |
| NCBI Official Symbol             | C8B                                                                     |
| NCBI Official Synonym Symbols    | C82                                                                     |
| NCBI Protein Information         | complement component C8 beta chain; complement component 8 subunit beta |
| UniProt Protein Name             | Complement component C8 beta chain                                      |
| UniProt Gene Name                | C8B                                                                     |
| UniProt Entry Name               | CO8B_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.

