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## Recombinant Mouse Complement C1r-A subcomponent (C1ra)

| Product Code      | CSB-EP806535MO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Uniprot No.       | Q8CG16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Form              | Liquid or Lyophilized powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Storage Buffer    | If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product Type      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Immunogen Species | Mus musculus (Mouse)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purity            | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sequence          | SIYLPQKLYGEVTSPLYPKPYPSDLETTTVITVPMGYRVKLVFWQFDVEPSEGC<br>FYDYVKISADKQTLGRFCGQLDSPLGNPPGSKEFMSQGNKMLLTFHTDFSNE<br>ENGTIMFYKGFLAYYQAVDLDECASQPNSVEEGLQPRCQHLCHNYVGGYFCS<br>CHPGYELQKDGQSCQAECSSELYTEPSGYVSSLEYPQPYPPDLRCNYSIRVE<br>RGLTVHLKFLDPFEIDDHQQVHCPYDQLQIYANGKNLGEFCGKQRPPDLDTSS<br>NAVDLLFFTDESGDSRGWKLHYTTETIKCPQPKALDEFTIIQDPQPQYQFRDYF<br>IVTCKQGYQLMEGNQALLSFTAVCQNDGTWHRAMPRCKIKNCGQPQSLSNG<br>DFRYITTKGVTTYEASIQYHCHEPYYKMLTRAGSSESMRGIYTCTAQGIWKNE<br>EEGEKMPRCLPVCGKPVNPVTQKERIIRGQPARPGNFPWQAFTTTHGRGGG<br>ALLGDRWILTAAHTIYPKHHNKENDNANPKMLVFLGHTNVEQIKKLGHHPVRR<br>VIIHPDYRQDEPNNFEGDIALLELENSVTLGPELLPICLPDNETFYGQGLMGYVS<br>GFGITEDKLAFDLRFVRLPVADSEACQRWLQTKKDTSPFSQNMFCSGDPAVQ<br>QDACQGDSGGVFAVRDRNRDIWVATGIVSWGIGCGEGYGFYTKVLNYVDWIK<br>KEMGDEN |
| Lead Time         | 3-7 business days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Research Area     | Others                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Source            | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Names        | C1ra                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Expression Region | 17-707aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Notes             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Tag Info          | N-terminal 10xHis-tagged and C-terminal Myc-tagged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mol. Weight       | 85.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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| Image | kDa M<br>116.0<br>66.2<br>45.0 | (Tris-Glycine gel) Discontinuous SDS-PAGE<br>(reduced) with 5% enrichment gel and 15%<br>separation gel. |
|-------|--------------------------------|----------------------------------------------------------------------------------------------------------|
|       | 35.0 <b>—</b><br>25.0 <b>—</b> |                                                                                                          |
|       | 18.4                           |                                                                                                          |

17-707. The expected molecular weight for the C1ra protein is calculated to be 85.7 kDa. The C1ra protein was expressed in e.coli. The C1ra coding gene included the N-terminal 10xHis tag and C-terminal Myc tag, which simplifies the detection and purification processes of the recombinant C1ra protein in following stages of expression and purification.

The complement C1r-A subcomponent in mice is a crucial component of the classical complement pathway, part of the innate immune system. Encoded by the C1ra gene, it functions as a serine protease that, along with its counterpart C1r-B, activates the C1 complex upon binding to immune complexes or microbial pathogens. Activation of the classical complement pathway leads to the initiation of the immune response, promoting inflammation, opsonization, and clearance of pathogens. Understanding the role of complement C1r-A in mice provides insights into the immune system's ability to recognize and eliminate foreign invaders, contributing to research on immune-related disorders and therapeutic strategies.

Reconstitution We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20?/-80?. Our default final concentration of glycerol is 50%. Customers could use it as reference.