For Research Use Only

Recombinant Rat C-Reactive Protein/CRP protein (His Tag)



Catalog Number: Eg0942

Basic Information

Species: Rat

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Rat C-Reactive Protein protein His20-Ser230 (Accession# P48199) with a His tag at the Cterminus.

GeneID:

25419

Accession: P48199

Predicted Molecular Mass:

24.1 kDa

SDS-PAGE:

25-28 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

C-reactive protein (CRP) is an evolutionary highly conserved member of the pentraxin superfamily of proteins. CRP consists of five identical subunits with molecular weight 20-30 kDa arranged as a cyclic pentamer. CRP exists in at least two conformationally distinct forms, native pentameric CRP (pCRP) and modified/monomeric CRP (mCRP). CRP plays important roles in inflammatory processes and host responses to infection including promoting agglutination, bacterial capsular swelling, phagocytosis, and complement fixation through its Ca2+-dependent binding to phosphorylcholine (PCh). CRP is mainly expressed by hepatocytes and secreted into plasma. The concentration of CRP will increase significantly in plasma during acute phase response to tissue injury infection or other inflammatory stimuli acute phase response to tissue injury, infection, or other inflammatory stimuli.

References

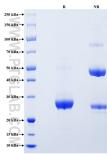
- 1. McFadyen JD. et al. (2020). Subcell Biochem. 94:499-520.

- 2. Pathak A. et al. (2019). Front Immunol. 10:943. 3. Singh SK. et al. (2019). Front Immunol. 10:1655. 4. Yao Z. et al. (2019). Inflamm Res. 68(10):815-823.

Synonyms

C-Reactive Protein/CRP, CRP, PTX 1, PTX1

Selected Validation Data



Purity of Recombinant Rat C-Reactive Protein was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.