Rat CRP / C-Reactive Protein (His Tag)

Catalog Number: 80041-R08H

General Information

Gene Name Synonym:
CRP

Protein Construction:
A DNA sequence encoding the rat CRP (NP_058792.1) extracellular domain (Met 1-Ser 230) was fused with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Endotoxin:
< 1.0 EU per μg of the protein as determined by the LAL method

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 21

Molecular Mass:
The recombinant rat CRP comprises 221 amino acids and predicts a molecular mass of 24.6 kDa. The apparent molecular mass of the rat CRP is approximately 30 kDa in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20 °C to -80 °C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

C-reactive protein (CRP) is synthesized by the liver in response to factors released by fat cells. It is a member of the pentraxin family of proteins. The levels of CRP rise in response to inflammation. Human C-reactive protein (CRP) is the classical acute phase reactant, the circulating concentration of which rises rapidly and extensively in a cytokine-mediated response to tissue injury, infection and inflammation. Serum CRP values are routinely measured, empirically, to detect and monitor many human diseases. However, CRP is likely to have important host defence, scavenging and metabolic functions through its capacity for calcium-dependent binding to exogenous and autologous molecules containing phosphocholine (PC) and then activating the classical complement pathway. CRP may also have pathogenic effects and the recent discovery of a prognostic association between increased CRP production and coronary atherothrombotic events is of particular interest.