General Information

Gene Name Synonym:
C-Reactive Protein; PTX1

Protein Construction:
A DNA sequence encoding the human CRP (P02741-1) (Met1-Pro224) was expressed and purified.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

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

Predicted N terminal: Gln 19

Molecular Mass:
The recombinant human CRP consists of 206 amino acids and has a predicted molecular mass of 23 kDa. As a result of glycosylation, the apparent molecular mass of CRP is approximately 26 kDa in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile 20mM Tris, 0.2M NaCl, 5mM CaCl2, pH 8.0 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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20°C to -80°C.

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.

Protein Description

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.

References