

Active Recombinant Human CRP Protein

Cat. No. CRP-226H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CRP Protein (Phe17-Pro224) without tag was expressed in mouse myeloma cell line.
Species	Human
Source	NS0
ProteinLength	17-224 a.a.
Description	The protein encoded by this gene belongs to the pentraxin family which also includes serum amyloid P component protein and pentraxin 3. Pentraxins are involved in complement activation and amplification via communication with complement initiation pattern recognition molecules, but also complement regulation via recruitment of complement regulators. The encoded protein has a calcium dependent ligand binding domain with a distinctive flattened beta-jellyroll structure. It exists in two forms as either a pentamer in circulation or as a nonsoluble monomer in tissues. It is involved in several host defense related functions based on its ability to recognize foreign pathogens and damaged cells of the host and to initiate their elimination by interacting with humoral and cellular effector systems in the blood. Consequently, the level of this protein in plasma increases greatly during acute phase response to tissue injury, infection, or other inflammatory stimuli. Elevated expression of the encoded protein is associated with severe acute respiratory syndrome coronavirus 2 infection.
Form	Homopentamer

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized recombinant human (rh) Fc gamma RIIA at 2 µg/mL (100 µL/well) can bind rhCRP with a linear range of 0.15-10 µg/mL.
Molecular Mass	26 kDa, reducing conditions
N-terminal Sequence Analysis	Phe17
Endotoxin	< 0.01 EU/µg of the protein by the LAL method.
Purity	> 97% by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Binding Activity
Storage	Avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Storage Buffer	Lyophilized from a 0.2 µm filtered solution in Tris-HCl, NaCl and CaCl ₂ with BSA as a carrier protein.
Reconstitution	Reconstitute at 200 µg/mL in sterile 20 mM Tris-HCl, pH 8.0 containing at least 0.1% human or bovine serum albumin.

GENE INFORMATION

Gene Name CRP C-reactive protein [Homo sapiens (human)]

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Official Symbol	CRP
Synonyms	CRP; C-reactive protein; PTX1; C-reactive protein; C-reactive protein, pentraxin-related; pentraxin 1
Gene ID	1401
mRNA Refseq	NM_000567
Protein Refseq	NP_000558
MIM	123260
UniProt ID	P02741

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA