

Recombinant Human C-Reactive Protein

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. PRO-335
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➤ **Background:**

CRP is an acute phase protein that correlates with inflammatory disease and is synthesized by hepatocytes during the acute phase response by certain cytokines (IL-1 and TNF Alpha and Beta). CRP levels increase dramatically (up to 1,000 fold) and serve as a useful marker of inflammation in such conditions as bacterial infection, rheumatoid arthritis, viral infections, transplantation rejection, meningitis, myocardial infarction, septicemia, osteomyelitis and others. CRP is also highly correlated to Serum Amyloid A levels.

➤ **Description :**

Recombinant Human C-Reactive Protein produced in E.Coli is a non-glycosylated polypeptide chain having a total molecular mass of 115kDa ,corresponding to the pentamer structure of 23 kDa monomer determined by amino acid sequence.
Recombinant Human Serum Albumin is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered clear solution.

➤ **Formulation:**

Recombinant Human C-Reactive Protein ,at a concentration of 1 mg/ml, lyophilized from 20 mM Tris (ph 7.5), 2mM CaCl₂, 0.14M NaCl and 0.05% NaN₃.

➤ **Stability:**

Lyophilized Recombinant C-Reactive Protein although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution C-Reactive Protein should be stored at 4 C between 2-7 days and for future use below -18 C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm.
2. Analysis by RP-HPLC, using a standard solution of CRP as a Reference Standard.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of Recombinant C-Reactive Protein.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.

➤ **Gene:**

Name:CRP
Synonyms:PTX1

➤ **Protein synonyms/aliases:**

C-reactive protein precursor

➤ **Precursor's functional components:**

C-reactive protein(1-205) .

➤ **Protein Family:**

Belongs to the pentaxin family.

➤ **Precursor Domain architecture:**



Domains found:
•Pentaxin

➤ **Latest Publications:**

1. Inflammation information. Testing for C-reactive protein may be a good way to keep tabs on the inflammation that causes heart attacks.

Harv Health Lett 2005 Jul;30(9):3

2. Exercise, C-reactive protein, and your heart.

Harv Mens Health Watch 2005 Jul;9(12):1-4

3. No effect of folic acid supplementation in the course of 1 year on haemostasis markers and C-reactive protein in older adults.

Thromb Haemost 2005 Jul;94(1):96-100

4. Predictive value of C-reactive protein in patients with unstable angina pectoris undergoing coronary artery stent implantation.

J Int Med Res 2005 Jul-Aug;33(4):389-96

5. C-reactive protein in peripheral arterial disease: relation to severity of the disease and to future cardiovascular events.

J Vasc Surg 2005 Aug;42(2):243-51

6. Relation of leukocytosis to C-reactive protein and interleukin-6 among patients undergoing percutaneous coronary intervention.

Am J Cardiol 2005 Aug 15;96(4):538-42