

PRODUCT INFORMATION



C-Reactive Protein (human, recombinant)

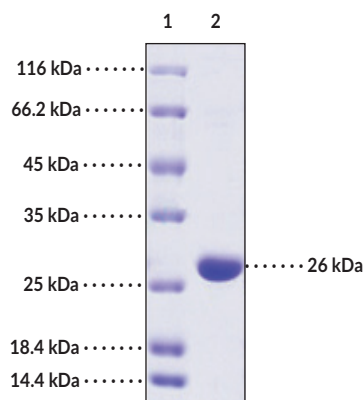
Item No. 37018

Overview and Properties

Synonym: CRP
Source: Recombinant human C-reactive protein expressed in HEK293 cells
Amino Acids: 19-224
Uniprot No.: P02741-1
Molecular Weight: 23 kDa
Storage: -80°C (as supplied)
Stability: ≥1 year
Purity: ≥90% estimated by SDS-PAGE
Supplied in: Lyophilized from sterile 20 mM Tris, 200 mM sodium chloride, 5 mM calcium chloride, pH 8, 5% trehalose, 5% mannitol, and 0.01% Tween 80
Endotoxin Testing: <1.0 EU/μg, determined by the LAL endotoxin assay

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: C-Reactive Protein

SDS-PAGE Analysis of C-Reactive Protein.

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

C-Reactive protein (CRP) is an acute phase protein and a member of the pentraxin family.¹ It is composed of five protomers arranged symmetrically around a central pore and is primarily expressed in, and secreted by, the liver. CRP modulates endothelial function, increases protein levels of intracellular adhesion molecule-1 (ICAM-1), vascular cell adhesion molecule-1 (VCAM-1), and E-selectin, stimulates coagulation, mediates uptake of LDL into macrophages, and destabilizes atherosclerotic plaques.¹⁻⁵ In addition, CRP binds to phosphocholine on microbes in a calcium-dependent manner, acts as a ligand for receptors on phagocytic leukocytes, mediates activation of monocytes and macrophages via IL-6 and other cytokines, and assists in the complement pathway.^{1,6,7} CRP plasma levels increase in response to acute and chronic inflammatory conditions, and high plasma CRP concentrations are associated with an increased risk for atherosclerosis.^{8,9} Cayman's C-Reactive Protein (human, recombinant) consists of 206 amino acids, has a calculated molecular weight of 23 kDa, and a predicted N-terminus of Gln19 after signal peptide cleavage. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 26 kDa due to glycosylation.

References

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7. Szalai, A.J., van Ginkel, F.W., Wang, Y., et al. Complement-dependent acute-phase expression of C-reactive protein and serum amyloid P-component. *J. Immunol.* **165**, 1030-1035 (2000).
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