

Cat#	SP-89548-5
Description:	C-Reactive Protein (CRP) (201-206) (AA: Lys-Pro-Gln-Leu-Trp-Pro) (MW: 767.93)
Size:	5 mg
Purity:	>95%
Store:	Desiccated at -20oC.

Pentraxins family of proteins acquired the name from their ability to form pentameric (or decameric) structures formed by non-covalent interactions. C-reactive protein (CRP or PTX1; mature chain 206 aa; chromosome 1q21-23) nonglycosylated, ~24 kda monomer and ~118 kda pentamer) is a ubiquitous protein found in both vertebrates and invertebrates. Originally CRP was defined as a substance, observed in the plasma of patients with acute infections that reacted with the C polysaccharide of the pneumococcus. It is one of the plasma proteins that are called acute phase reactants because of a pronounced rise in concentration after tissue injury or inflammation; in the case of CRP the rise may be 1000-fold or more. CRP is composed of 5 identical, 21,500-molecular weight subunits. It is detectable on the surface of about 4% of normal peripheral blood lymphocytes. Acute phase reactant CRP is produced in the liver; those cells produce CRP detectable on lymphocytes.

It has been proposed that the function of CRP relates to its ability to recognize specifically foreign pathogens and damaged cells of the host and to initiate their elimination by interacting with humoral and cellular effector systems in the blood. CRP binds with high affinity to chromatin. One of its major physiologic functions is to act as a scavenger for chromatin released by dead cells during the acute inflammatory process. Thus, the CRP molecule has both recognition and an effector function.

More recently, it has been shown that minor elevations of C-reactive protein are predictive of cardiovascular events in patients with coronary heart disease. C-reactive protein not only may be a marker of low-grade chronic systemic inflammation but also may be directly involved in atherosclerosis. It can amplify the anti-inflammatory response through complement activation, tissue damage, and activation of endothelial cells. CRP has been found to be increased in serum of patients with a wide variety of diseases including infections by gram-positive and gram-negative bacteria, acute phase of rheumatoid arthritis, abdominal abscesses, inflammation of bile ducts myocardial infarction, and malignant tumors. CRP may be found in patients with Guillain-Barre syndrome and multiple sclerosis, certain viral infections, tuberculosis, acute infectious hepatitis, many other necrotic and inflammatory diseases, burned patients, and after surgical trauma

Reference: Vainas T (2003) Circulation. 2003;107:1103-1105;

For invitro research use only

Related items :

SP-89546-5	C-Reactive Protein (CRP) (77-82) (AA: Val-Gly-Gly-Ser-Glu-Ile) (MW: 560.61)
SP-89547-5	C-Reactive Protein (CRP) (174-185) (AA: Ile-Tyr-Leu-Gly-Gly-Pro-Phe-Ser-Pro-Asn-Val-Leu) (MW: 1276.51)
SP-89548-5	C-Reactive Protein (CRP) (201-206) (AA: Lys-Pro-Gln-Leu-Trp-Pro) (MW: 767.93)
CRP11-A	Anti-human C-Reactive Protein (CRP) IgG, aff pure
CRP11-FITC	Anti-human C-Reactive Protein (CRP)-FITC Conjugate, aff pure
CRP11-HRP	Anti-human C-Reactive Protein (CRP)-HRP Conjugate, aff pure
SP-89548-5	120703A