



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet Rabbit anti-C-reactive protein antibody

**Catalog No.**  
130-10026

**Isotype:**  
Rabbit Ig G

**Species:**  
Human

**Accession No:**  
Q07203

## Description

C-reactive protein (CRP) belongs to the pentaxin family. 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. CRP is synthesized by the liver in response to factors released by fat cells (adipocytes). Consequently, the level of this protein in plasma increases greatly during acute phase response to tissue injury, infection, or other inflammatory stimuli.

CRP is used mainly as a marker of inflammation. Apart from liver failure, there are few known factors that interfere with CRP production. Measuring and charting CRP values can prove useful in determining disease progress or the effectiveness of treatments. Blood, usually collected in a serum-separating tube, is analysed in a medical laboratory or at the point of care. Various analytical methods are available for CRP determination, such as ELISA, immunoturbidimetry, rapid immunodiffusion, and visual agglutination.

## Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:80000 (at least detecting 12.5ng/ml)
Western Blotting			*	
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### **Preparation**

Immunogen was synthetic peptide derived from Human C-reactive protein. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation followed by Protein A/G affinity chromatography.

### **Binding Activity**

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat C-reactive protein was not tested yet.

### **Reconstitution**

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, like Sodium Azide. ***It final concentration is indicated in shipping vial.***

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at  $4^{\circ}\text{C}$ . **Please avoid freeze-thaw cycles.**

### **Storage**

Keep it at  $4^{\circ}\text{C}$  if intended for use within a month, otherwise, Store at  $-20^{\circ}\text{C}$ . **Minimize freezing and thawing when use.**

### **Related products**

1. RayBio® Human Cytokine Antibody Array 7 (Cat# AAH-CYT-7-2)
2. Adiponectin EIA Kit (Cat#EIA-ACRP-1)

### **Reference**

Dehghan A; et.al., (2007). Genetic variation, C-reactive protein levels, and incidence of diabetes. Diabetes 56 (3): 872–8.

St-Onge, et.al., (2009). Baseline serum C-reactive protein is associated with lipid responses to low-fat and high-polyunsaturated fat diets. J Nutr 139 (4): 680–3.

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