

Product Specification Sheet

**C-Reactive Protein (CRP) Antibodies**

|                  |   |                     |
|------------------|---|---------------------|
| Cat. # CRP16-A   | Rabbit Anti-Rat CRP IgG # 1, aff pure   | <b>SIZE:</b> 100 ug |
| Cat. # CRP16-HRP | Rabbit Anti-Rat CRP IgG-HRP Conjugate   | <b>SIZE:</b> 100 ug |
| Cat. # CRP16-C   | Purified Rat CRP protein control for WB | <b>SIZE:</b> 100 ul |

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.

**Source of Antigen and Antibodies**

Rat CRP was purified from rat serum (>95%) using biochemical and immunoaffinity techniques. Purity is tested by RID, SDS-PAGE, and IEP.

**Cat # CRP16-A, unconjugated antibody**

Purified Rat CRP was used as antigen to produce **polyclonal antibodies** in rabbits (Cat # **CRP16-A**). Antibodies were affinity purified and supplied as 1 mg/ml solution in PBS, pH 7.4 containing 0.05% sodium azide. Lyophilized antibodies should be reconstituted in 100 ul water and stored frozen in suitable aliquots.

**Suggested Dilutions:** 1:500-1:5K for Western; 1:5K-1:20K for ELISA. Further optimization may be needed under actual experimental conditions.

**Cat# CRP16-C**

Rat CRP was purified from pooled serum/fluids (>90%) using biochemical and immunoaffinity techniques. Purity is tested by RID, SDS-PAGE, and IEP.

Rat CRP16-C protein for Western blot +ve control (**Cat # CRP16-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **CRP16-C** for good visibility with antibody Cat # **CRP16-A**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It

should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **CRP16-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly

**Species Specificity**

Antibody # CRP16-A is specific for rat CRP. No reactivity is observed with SAP or other pentraxins. There is minimal crossreactivity with mouse and human CRP. Other species are not tested. We recommend using anti-human CRP (cat # CRP11-A) for detecting human CRP.

**Cat # CRP16-HRP (Anti-CRP-HRP conjugate)**

Affinity purified polyclonal **anti-Rat CRP IgG (cat # CRP16-A) was coupled to Horseradish Peroxidase (HRP) (cat # CRP16-HRP)**. Molar enzyme to antibody ratio is ~4:1. It is supplied at 1 mg/ml in 50 mM HEPES, pH 7.1, 0.1 M NaCl, 0.2% BSA and 0.01% thimerosal. Store at 4oC. Do freeze and thaw.

**Suggested Dilutions:** 1:1-1:10K for Western; 1:10K-1:50K for ELISA. Further optimization may be needed under actual experimental conditions.

**Shipping:** 4oC for solutions and room temp for powder.

*\*All product are for In vitro research use only.*

**Related material available from ADI**

Rat and Dog CRP antibodies and reference controls, Human and Rat CRP ELISA Kits

CRP16-A-C-HRP 71217A