



Specification

Product name	CRP Antibody
Immunogen	Recombinant full-length protein.
Source/Isotype	Mouse IgG2a Kappa
Reactivity	Human
Purification	Protein G purified from hybridoma culture supernatant
Application	ELISA, others unspecified
Form	Liquid
Storage Buffer	In 1×PBS, pH 7.2
Storage Instruction	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or lower long term. Aliquot to avoid repeated freezing and thawing.
Concentration	5.1mg/mL
Lot.	20231013
Size	1000μg

Supporting Data

1. Double antibody sandwich method

1.1 Reagents:

- 1.1.1 Coating Buffer: Carbonate Buffer (2.93 g NaHCO₃, 1.59 g Na₂CO₃, 1L ddH₂O)
- 1.1.2 Diluent: PBS (137 mM NaCl, 2.7 mM KCl, 8.1 mM Na₂HPO₄, 1.5mM KH₂PO₄)
- 1.1.3 Blocking Solution: 1% BSA in PBS
- 1.1.4 Secondary Ab: anti mouse IgG-HRP(Sigma A2554-1ML)

1.2 Assay Protocol:

Note: The following protocol is a guideline, user need to determine their optimal experimental condition for best performance.

- 1.2.1 Coat plate with Recombinant protein 0.5ug/ml, 100ul/well, incubate at 4°C for overnight.
- 1.2.2 Wash the plate with PBST (0.05% Tween-20) once.
- 1.2.3 Add 200μL of blocking buffer each well, incubate the plate at 37°C for 2hr or 4°C overnight.
- 1.2.4 Add sample 100ul/well, incubate the plate at 37°C for 1hr.
- 1.2.5 Wash the plate with PBST (0.05% Tween-20) 3 times.
- 1.2.6 Add secondary Ab, 1:10k diluted anti-mouse IgG-HRP, 100ul/well, incubate the plate at 37°C for 0.5hr.
- 1.2.7 Wash the plate with PBST (0.05% Tween-20) 3 times.



- 1.2.8 Add 100ul/well TMB, incubate at room temperature for 10min, add 50ul/well 1N HCl or 2% H₂SO₄.
- 1.2.9 Read absorbance at 450nm.

Data Background

Inflammation is a kind of defense reaction of the body to various pathogens and tissue damage, and it is a protective factor of the body. However, excessive inflammatory response will aggravate tissue damage and cause a series of clinical complications and adverse consequences. C-reactive protein (CRP) is synthesized by liver cells, produced during fetal life and not transmitted by the maternal placenta. The mechanism of its production is that when the body is infected or the tissue is damaged, macrophages and other white blood cells are activated to produce cytokines such as interleukin-6 (IL-6), interleukin-1 (IL-1), tumor necrosis factor TNF- α and other mediators, which reach the liver and stimulate the synthesis of CRP by liver cells and epithelial cells. Structurally, CRP contains 5 polypeptide chain subunits, non-covalently bound to a disk polymer with a molecular weight of 115,000-140,000, CRP is a typical acute phase protein.

Gene Information

UniProt ID: P02741

Entrez-Gene Id: 1401

Protein Name: C-reactive protein

Related Product

Product	Cat.	Description
CRP Antibody	RYZ004AB4B-0001	ELISA, others unspecified.
CRP Antibody	RYZ004AB6B-0001	ELISA, others unspecified.
CRP Antibody	RYZ004AB11B-0001	ELISA, others unspecified.
CRP Antibody	RYZ004AB9B-0001	ELISA, others unspecified.
CRP Antibody	RYZ004AB12B-0001	ELISA, others unspecified.