APA821Hu01 100μg
Active C Reactive Protein (CRP)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Natural Extract

Host: Human (Plasma)

Purity: >98% as determined by SDS-PAGE.

Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).

Purification Methods: Salt co-precipitation and ionic-Exchange chromatography.

Traits: Freeze-dried powder

Buffer Formulation: 10mM PBS, pH7.4, containing 5% trehalose.

Original Concentration: 200μg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.
(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.5

Accurate Molecular Mass: 25.0kDa

Observe Molecular Mass: 25kDa

[USAGE]

Reconstitute in 10mM PBS (PH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8^{o}C for one month.
Aliquot and store at -80^{o}C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[ACTIVITY]

C Reactive Protein (CRP) is an annular (ring-shaped), pentameric protein, a member of the pentraxin family of proteins. It is an acute-phase protein of hepatic origin that increases following interleukin-6 secretion by macrophages and T cells. Its physiological role is to bind to lysophosphatidylcholine expressed on the surface of dead or dying cells (and some types of bacteria) in order to activate the complement system via C1q. CRP is synthesized by the liver in response to factors released by macrophages and fat cells (adipocytes). Besides, Ribosomal Protein L23A (RPL23A) has been identified as an interactor of CRP, thus a binding ELISA assay was conducted to detect the interaction of recombinant human CRP and recombinant human RPL23A. Briefly, CRP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to RPL23A-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CRP pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of CRP and RPL23A was shown in Figure 1, and this effect was in a dose dependent manner.

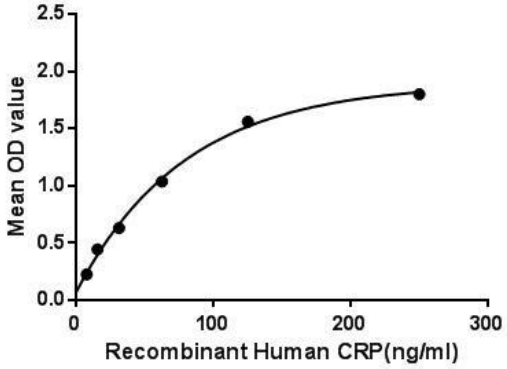

Figure 1. The binding activity of CRP with RPL23A.

[IDENTIFICATION]

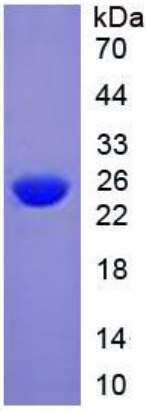

Figure 2. SDS-PAGE

Sample: Active recombinant CRP, Human

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.