

Product datasheet

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ARG80870 Human CRP ELISA Kit

Package: 96 wells Store at: 4°C

Summary

Product Description ARG80870 Human CRP ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CRP in

serum and plasma.

Tested Reactivity Hu

Tested Application ELISA

Target Name C Reactive Protein

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm

 $Sensitivity \hspace{1cm} 1 \, \mu g/m I$

Sample Type Serum and plasma.

Standard Range $5 - 100 \mu g/ml$

Sample Volume $10 \, \mu l$

Alternate Names 1-205; PTX1; C-reactive protein

Application Instructions

Assay Time 30, 30, 10 min

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test

reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual

for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links <u>GeneID: 1401 Human</u>

Swiss-port # P02741 Human

Gene Symbol CRP

Gene Full Name C-reactive protein, pentraxin-related

Background C-Reactive Protein (CRP) is an acute-phase protein, produced exclusively in the liver. Interleukin-6 is the

mediator for the synthesis by the hepatocytes of CRP, a pentamer of approximately 120.000 Daltons. CRP is present in the serum of normal persons at concentrations ranging up to 5mg/l. The protein is produced by the fetus and the neonate and it does not pas the placental barrier, as such it can be used

for the early detection of neonatal sepsis.

Because febrile phenoena, leukocyte count and erytrhocyte sedimentation rate (ESR) are often misleading, investigators and clinicans now prefer a quantitative CRP determination as a marker for acute inflammation and tissue necrosis. Within 6 hours of an acute inflammatory challenge the CRP level starts to rise. Serum concentration of CRP increases significantly in cases of both infectious and non-infectious inflammation, of tissue damage and necrosis and in the presence of malignant tumours. CRP is present in the active stages of inflammatory disorders like rheumatoid arthritis, ankylosing spondylitis, Reiter's syndrome, psoriatric arthropathy, systemic lupus erythematosus, polyarteritis, ulcerative colitis and Crohn's disease. Injuries causing tissue breakdown and necrosis are associated with increases in serum CRP which are seen in thermal burns, major surgery and myocardial infarction. Widespread malignant disease with carcinoma of the lung, stomach, colon, breast, prostate and pancreas, Hodgkin's disease, non-Hodgkin's lymphoma and lymphosarcoma will give rise to high levels of CRP resulting from tissue damage by invading tumour cells. CRP, therefore may be used to monitor malignancy. The CRP-level increases dramatically following microbial infections, and this may be particularly helpful for the diagnosis and monitoring of bacterial septicemia in neonates and other immunocompromised patients at risk. In children, CRP is useful for differential diagnosis of bacterial and viral meningitis. Because the biological half-life of this protein is only 24 hours, CRP accurately parallels the activity of the inflammation process and the CRP concentration decreases much faster than ESR1,2 or any other acute phase parameter, which is particularly useful in monitoring appropriate treatment of bacterial diseases with antibiotics. C-Reactive Protein measurements during the early and late post transplant period of bone marrow and organ transplantations is particularly useful in the management of interfering infections in these immunosuppressed patients.

Highlight

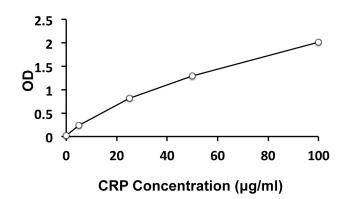
Related products:

<u>C Reactive Protein antibodies;</u> <u>C Reactive Protein ELISA Kits;</u> <u>C Reactive Protein Duos / Panels;</u> New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Research Area

Cell Biology and Cellular Response kit; Cell Death kit; Gene Regulation kit; Immune System kit; Metabolism kit

Images



ARG80870 Human CRP ELISA Kit standard curve image

ARG80870 Human CRP ELISA Kit results of a typical standard run with optical density reading at 450 nm.