

Human CRP ELISA Kit (C-Reactive protein), Fluorescent ab278042

重组 SimpleStep ELISA

6 图像

概述

产品名称 人CRP ELISA试剂盒(C-Reactive蛋白), Fluorescent

检测方法 Fluorescent

精确度 批次内

样品	n	Mean	SD	CV%
Supernatant	8			2.5%

批次间

样品	n	Mean	SD	CV%
Supernatant	3			3.1%

样品类型 Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma, Cerebral Spinal Fluid

检测类型 Sandwich (quantitative)

灵敏度 1.23 pg/ml

范围 1.95 pg/ml - 8000 pg/ml

回收率 特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	110	105% - 113%
Serum	88	83% - 93%
Hep Plasma	98	89% - 110%
EDTA Plasma	100	95% - 104%
Cit plasma	91	86% - 97%

样品类型	平均%	范围
Cerebral Spinal Fluid	88	80% - 101%

检测时间

1h 30m

实验步骤

One step assay

种属反应性

与反应: Human

产品概述

C-Reactive Protein (CRP) *in vitro* CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of C-Reactive Protein (CRP) protein in human serum, plasma, and cell culture supernatants.

This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click [here](#) for a list of recommended Microplate Readers.

If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at www.softmaxpro.org.

The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.

说明

CRP displays several functions associated with host defense: it promotes agglutination, bacterial capsular swelling, phagocytosis and complement fixation through its calcium-dependent binding to phosphorylcholine. CRP can interact with DNA and histones and it may scavenge nuclear material released from damaged circulating cells. CRP is secreted; it forms a homopentamer pentaxin (or pentraxin) which have a discoid arrangement of 5 non-covalently bound subunits. CRP binds 2 calcium ions per subunit. The concentration of CRP in plasma increases greatly during acute phase response to tissue injury, infection or other inflammatory stimuli. It is induced by IL1/interleukin-1 and IL6/interleukin-6.

平台

Pre-coated microplate (12 x 8 well strips)

性能

存放说明

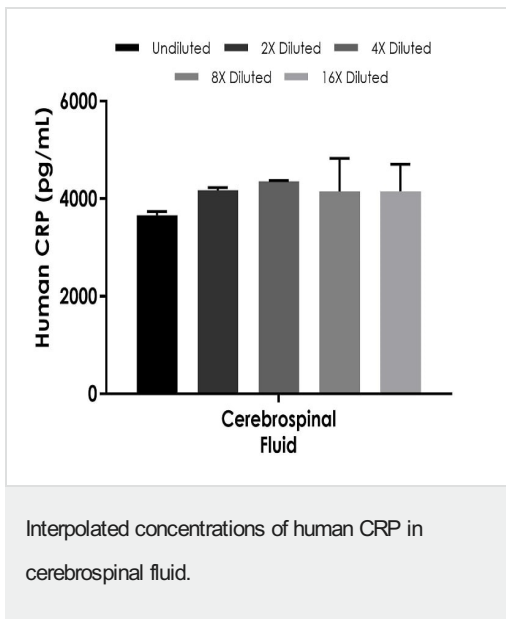
Store at +4°C. Please refer to protocols.

组件	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Human CRP (C-Reactive Protein) Capture Antibody	1 x 600µl

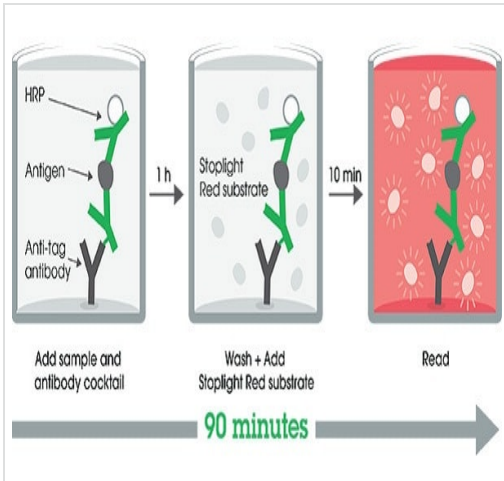
组件	1 x 96 tests
10X Human CRP (C-Reactive Protein) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
Antibody Diluent 4BI	1 x 6ml
Human CRP (C-Reactive Protein) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

功能	Displays several functions associated with host defense: it promotes agglutination, bacterial capsular swelling, phagocytosis and complement fixation through its calcium-dependent binding to phosphorylcholine. Can interact with DNA and histones and may scavenge nuclear material released from damaged circulating cells.
组织特异性	Found in plasma.
序列相似性	Belongs to the pentaxin family. Contains 1 pentaxin domain.
细胞定位	Secreted.

图片

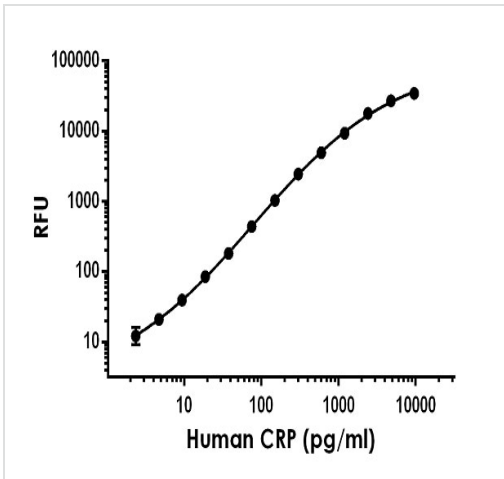


Interpolated concentration of native CRP was measured in duplicate at different sample concentrations. Undiluted samples are 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in Sample Diluent NS.



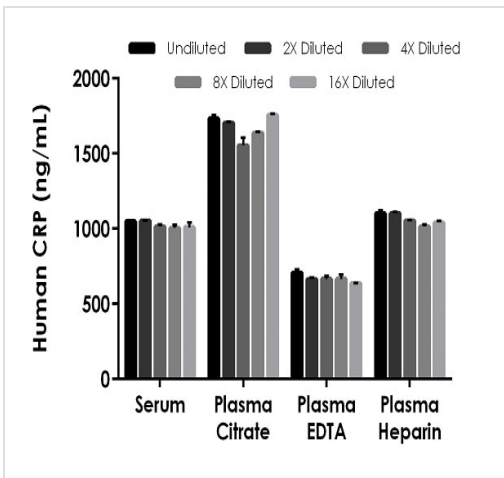
Catchpoint ELISA Protocol Diagram

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



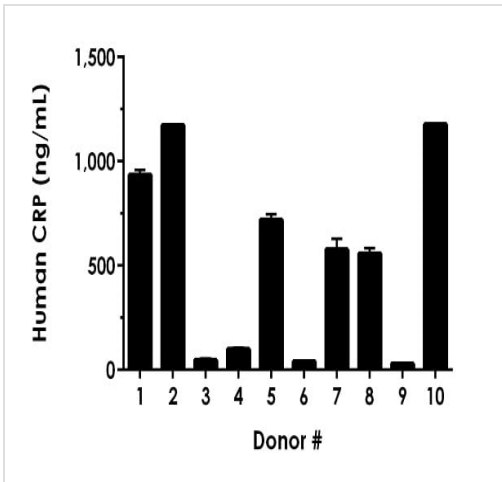
Example of human CRP standard curve in Sample Diluent NS.

Raw data generated on SpectraMax M4 Multi-Mode Microplate Reader is shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native CRP in human serum and plasma samples.



The concentrations of CRP were measured in duplicates, interpolated from the CRP standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:1000, plasma (citrate) 1:2000, plasma (EDTA) 1:1000, plasma (heparin) 1:1000. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CRP concentration was determined to be 1025.5 ng/mL in serum, 1676.5 ng/mL in plasma (citrate) and 668.3 ng/mL in plasma (EDTA), and, 1062.8 ng/mL in plasma (heparin).



Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CRP concentration was determined to be 535.7 ng/mL with a range of 28.1 – 1180.4 ng/mL.

Serum from ten individual healthy human male donors was measured in duplicate.

Powered by recombinant antibodies

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Sandwich ELISA - Human CRP ELISA Kit (C-
Reactive protein), Fluorescent (ab278042)

To learn more about the advantages of recombinant antibodies see [here](#).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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