



Product datasheet

Human MCP3 ELISA Kit (CCL7) ab193769

SimpleStep ELISA

3 References 5 Images

Overview

|                  |  |           |      |                 |      |
|------------------|--|-----------|------|-----------------|------|
| Product name     | Human MCP3 ELISA Kit (CCL7)  |           |      |                 |      |
| Detection method | Colorimetric   |           |      |                 |      |
| Precision        | Intra-assay  |           |      |                 |      |
|                  | Sample   | n         | Mean | SD              | CV%  |
|                  | Overall  | 5         |      |                 | 2%   |
|                  | Inter-assay  |           |      |                 |      |
|                  | Sample   | n         | Mean | SD              | CV%  |
|                  | Overall  | 3         |      |                 | 6.8% |
| Sample type      | Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma |           |      |                 |      |
| Assay type       | Sandwich (quantitative)  |           |      |                 |      |
| Sensitivity      | 10.3 pg/ml   |           |      |                 |      |
| Range            | 46.875 pg/ml - 3000 pg/ml  |           |      |                 |      |
| Recovery         | Sample specific recovery   |           |      |                 |      |
|                  | Sample type  | Average % |      | Range           |      |
|                  | Serum  | 99.7      |      | 98.4% - 101.2%  |      |
|                  | Cell culture media   | 107.3     |      | 103.8% - 112.9% |      |
|                  | Hep Plasma   | 98.5      |      | 97% - 99.5%     |      |
|                  | EDTA Plasma  | 87.8      |      | 84.7% - 89.6%   |      |
|                  | Cit plasma   | 99        |      | 95.6% - 101%    |      |
| Assay time       | 1h 30m   |           |      |                 |      |
| Assay duration   | One step assay   |           |      |                 |      |

**Species reactivity****Reacts with:** Human**Product overview**

Human MCP3 ELISA Kit (CCL7) (ab193769) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MCP3 (CCL7) protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human MCP3 (CCL7) with 10.3 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes**

MCP3 (CCL7) is a monomeric secreted chemotactic factor of intercrine (chemokine cc) family. MCP3 attracts monocytes and eosinophils, but not neutrophils. MCP3 augments monocyte anti-tumor activity. It also induces the release of gelatinase B. MCP3 protein can bind heparin. Binds to CCR1, CCR2 and CCR3.

**Platform**

Microplate (12 x 8 well strips)

**Properties****Storage instructions**

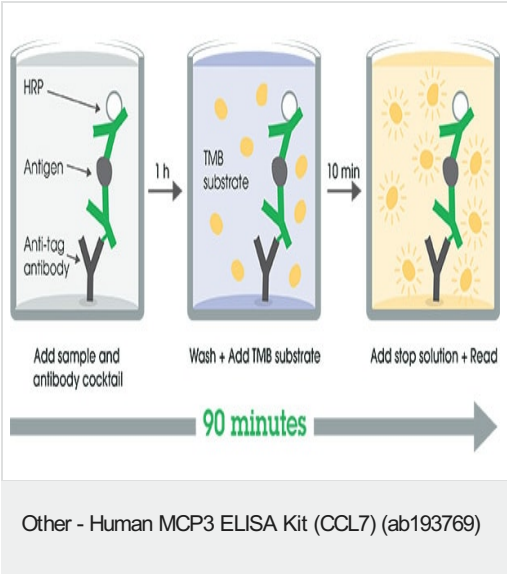
Store at +4°C. Please refer to protocols.

| Components  | 1 x 96 tests |
|---|--------------|
| 10X Human MCP3 Capture Antibody                     | 1 x 600µl    |
| 10X Human MCP3 Detector Antibody                    | 1 x 600µl    |
| 10X Wash Buffer PT (ab206977)                       | 1 x 20ml     |
| Antibody Diluent CPI - HAMA Blocker (ab193969)      | 1 x 6ml      |
| Human MCP3 Lyophilized Recombinant Protein          | 2 vials      |
| Plate Seals   | 1 unit       |
| Sample Diluent 50BP                                 | 1 x 20ml     |
| Sample Diluent NS (ab193972)                        | 1 x 50ml     |
| SimpleStep Pre-Coated 96-Well Microplate (ab206978) | 1 unit       |

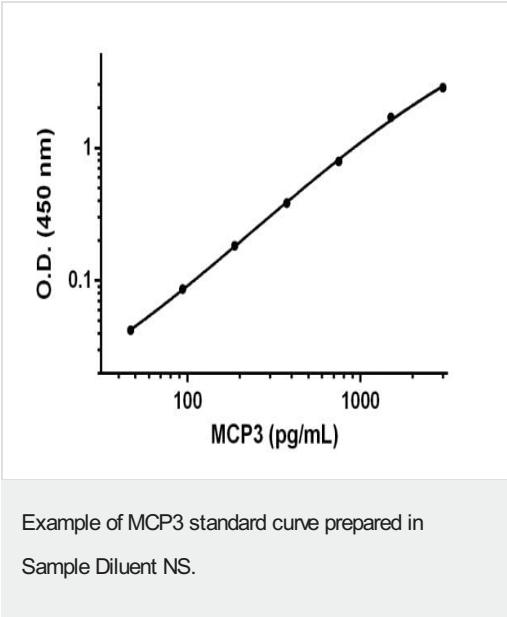
| Components               | 1 x 96 tests |
|--------------------------|--------------|
| Stop Solution            | 1 x 12ml     |
| TMB Development Solution | 1 x 12ml     |

|                                  |  |
|----------------------------------|--|
| Function                         | Chemotactic factor that attracts monocytes and eosinophils, but not neutrophils. Augments monocyte anti-tumor activity. Also induces the release of gelatinase B. This protein can bind heparin. Binds to CCR1, CCR2 and CCR3. |
| Sequence similarities            | Belongs to the intercrine beta (chemokine CC) family.  |
| Post-translational modifications | O-glycosylated.  |
| Cellular localization            | Secreted.  |

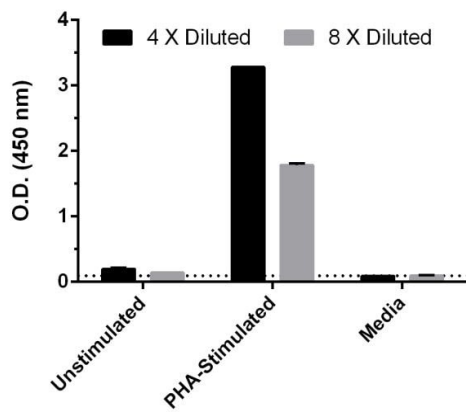
Images



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.

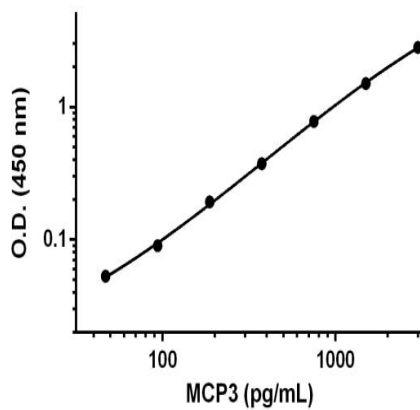


Background-subtracted data values (mean +/- SD) are graphed.



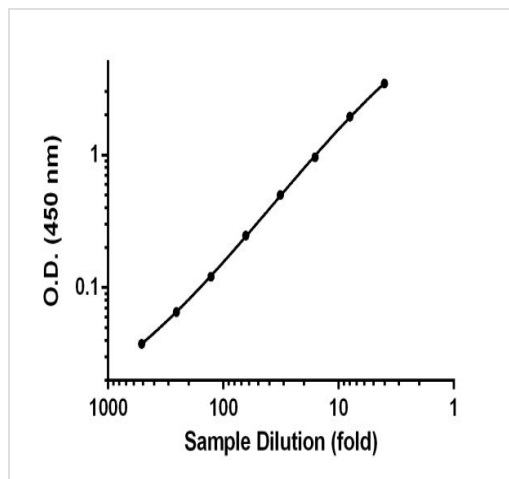
Comparison of MCP3 concentrations in unstimulated and PHA-stimulated Human PBMC.

PBMC were grown in the absence or presence of phytohemagglutinin (PHA) for 48 hours. MCP3 concentrations were measured in 4 X and 8 X diluted cell culture supernatants of the unstimulated PBMC and the stimulated PBMC, and 10F RPMI1640 media. Raw data values (mean  $\pm$  SD, n=2) are graphed. The dotted line represents Blank control.



Example of MCP3 standard curve prepared in Sample Diluent 50 BP.

Background-subtracted data values (mean  $\pm$  SD) are graphed.



Background-subtracted data values (mean  $\pm$  SD,  $n = 2$ ) are graphed.

Titration of 48 hours PHA-stimulated PBMC cell culture supernatant samples within the working range of the assay.

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors