# abcam

## Product datasheet

## Human MCP2 ELISA Kit ab223856

ייבידי SimpleStep ELISA

画像数 10

#### 製品の概要

製品名

Human MCP2 ELISA Kit

検出方法

Colorimetric

再現性

Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
Cell Extract	3			3.2%

Inter-Assay(日差再現性)

サンプル	N	平均値	SD	CV%	
Cell Extract	3			10.9%	

サンプルの種類

Cell culture supernatant, Serum, Cell culture extracts, Tissue Extracts, Hep Plasma, EDTA

Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 1.1 pg/ml

検出範囲 1.25 pg/ml - 160 pg/ml

添加回収試験

特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Serum	132	123% - 146%
Cell culture extracts	99	84% - 117%
Hep Plasma	113	112% - 117%
EDTA Plasma	94	85% - 100%
Cit plasma	126	115% - 138%

全工程の試験時間

1h 30m

ステップ

種交差性

製品の概要

One step assay

交差種: Human

Human MCP2 ELISA Kit (ab223856) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MCP2 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human MCP2 with 1.1 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 (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Monocyte chemoattractant protein 2 (MCP2), known also as C-C motif chemokine 8 (CCL8) is chemotactic factor that attracts monocytes, lymphocytes, basophils and eosinophils. Chemokines and their receptors, in conjunction with adhesion molecules and their ligands, provide cues to enable tissue-specific homing of T cells in the steady state and during inflammation. The processed form MCP2(6-76) does not show monocyte chemotactic activity, but inhibits the chemotactic effect most predominantly of CCL7, and also of CCL2 and CCL5 and MCP2. MCP2 protein can bind heparin.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

#### 試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

#### 製品の特性

特記事項

#### 保存方法

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

内容	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml

内容	1 x 96 tests
10X Human MCP2 Capture Antibody	1 x 600µl
10X Human MCP2 Detector Antibody	1 x 600µl
Human MCP2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 75BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

機能

Chemotactic factor that attracts monocytes, lymphocytes, basophils and eosinophils. May play a role in neoplasia and inflammatory host responses. This protein can bind heparin. The processed form MCP-2(6-76) does not show monocyte chemotactic activity, but inhibits the chemotactic effect most predominantly of CCL7, and also of CCL2 and CCL5 and CCL8.

組織特異性

Highest expression found in the small intestine and peripheral blood cells. Intermediate levels seen in the heart, placenta, lung, skeletal muscle, thymus, colon, ovary, spinal cord and pancreas.

Low levels seen in the brain, liver, spleen and prostate.

配列類似性

Belongs to the intercrine beta (chemokine CC) family.

翻訳後修飾

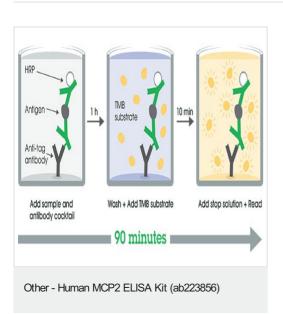
 $\hbox{N-terminal processed form MCP-2} (6\text{-}76) is produced by proteolytic cleavage after secretion from$ 

peripheral blood monocytes.

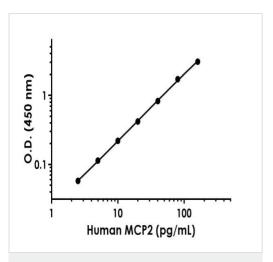
細胞内局在

Secreted.

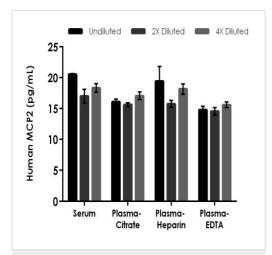
#### 画像



SimpleStep ELISA technology allows the formation of the antibodyantigen 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.



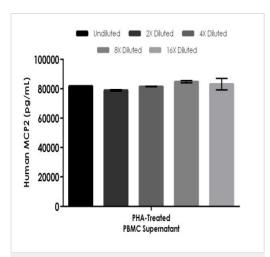
Example of Human MCP2 standard curve in Sample Diluent 75BS.



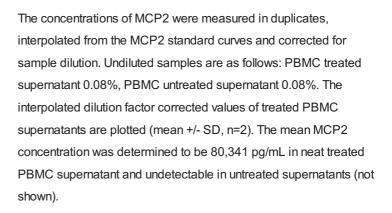
Interpolated concentrations of native MCP2 in Human serum and plasma samples.

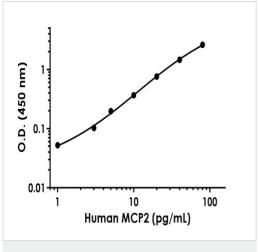
Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of MCP2 were measured in duplicates, interpolated from the MCP2 standard curves. Undiluted samples are as follows: serum 100%, plasma (citrate) 100%, plasma (heparin) 100% and plasma (EDTA) 100%. The interpolated values are plotted (mean +/- SD, n=2). The mean MCP2 concentration was determined to be 19 pg/mL in neat serum, 16 pg/mL in neat plasma (citrate), 18 pg/ml in neat plasma (heparin), and 15 pg/mL in neat plasma (EDTA).



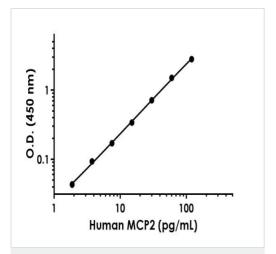
Interpolated concentrations of native MCP2 in Human 1.5%-PHA-treated and untreated PBMC (2 days) supernatants.





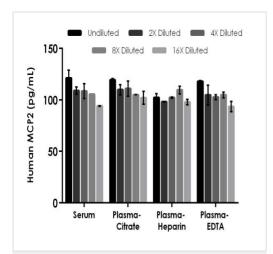
Example of Human MCP2 standard curve in Sample Diluent NS.





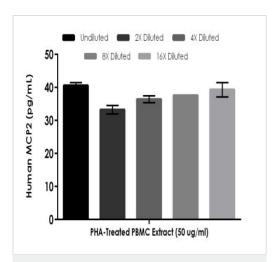
Example of Human MCP2 standard curve in 1X Cell Extraction Buffer PTR.

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



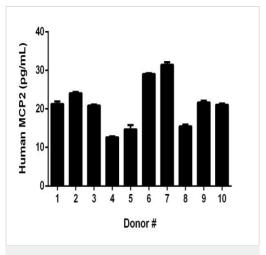
Interpolated concentrations of spike MCP2 in Human serum and plasma samples diluted in Sample Diluent 75BS.

The concentrations of MCP2 were measured in duplicates, interpolated from the MCP2 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 100%, plasma (citrate) 100%, plasma (heparin) 100% and plasma (EDTA) 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

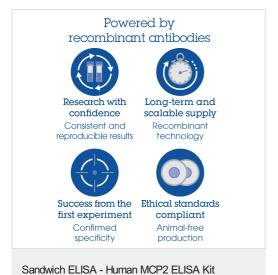


Interpolated concentrations of native MCP2 in Human 1.5%, 2-day PHA-treated PBMC extract, based on a 50  $\mu$ g/mL extract load.

The concentrations of MCP2 were measured in duplicate and interpolated from the MCP2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean MCP2 concentration was determined to be 37 pg/ml in treated PBMC extract and undetectable in untreated PBMC extract (not shown).



Serum from ten individual healthy Human male donors was diluted four-fold and measured in duplicate. Interpolated, dilution factor-corrected values are plotted (mean +/-SD, n=2). The mean MCP2 concentration was determined to be 21 pg/mL with a range of 12-32 pg/mL in neat serum.



(ab223856)

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"

#### 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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

### Terms and conditions

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