

Human MMP1 ELISA Kit ab215083

リコンビナント SimpleStep ELISA

11 References 画像数 8

製品の概要

製品名 Human MMP1 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%
Overall	8			4%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Overall	3			2.8%

サンプルの種類 Cell culture supernatant, Serum, Cell culture extracts, Hep Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 19.64 pg/ml

検出範囲 93.75 pg/ml - 6000 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
Cell culture supernatant	103	91% - 114%
Serum	106	98% - 117%
Cell culture extracts	104	96% - 111%
Hep Plasma	95	93% - 100%
Cit plasma	94	89% - 101%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性

交差種: Human

非交差種: Cow

製品の概要

Human MMP1 ELISA Kit (ab215083) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MMP1 protein in cit plasma, hep plasma, serum, cell culture extracts, and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human MMP1 with 19.64 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.

特記事項

MMP1 is a member of the matrix metalloproteinase family of proteins. These proteins function in the breakdown of the extracellular matrix during a variety of normal and pathological cellular process. MMP1 is an interstitial and fibroblast collagenase.

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)

製品の特徴

保存方法

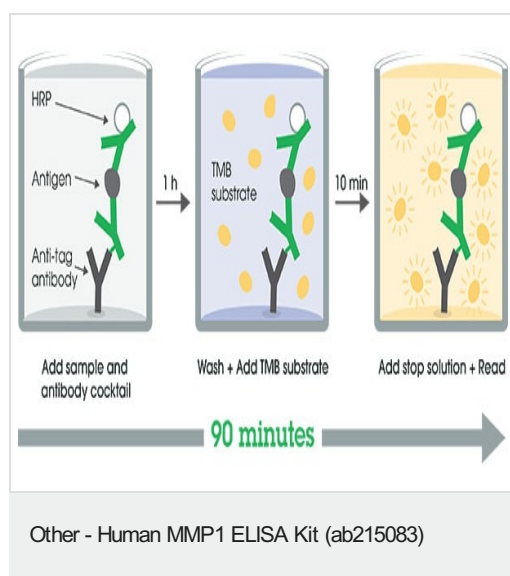
Store at +4°C. Please refer to protocols.

内容	1 x 96 tests	1 x 96 tests
10X Human MMP1 Capture Antibody	1 x 600µl	1 x 600µl
10X Human MMP1 Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml	1 x 10ml
Antibody Diluent CPI2	1 x 6ml	1 x 6ml

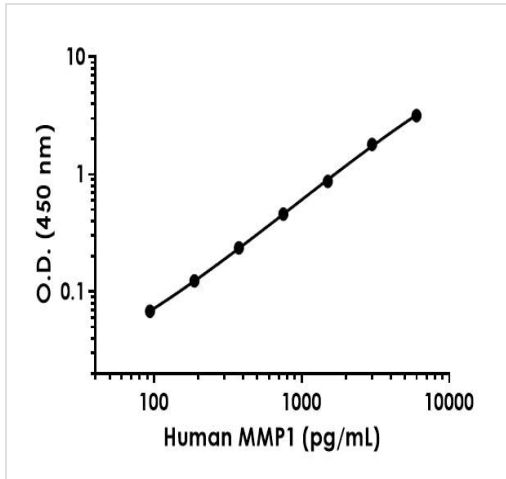
内容	1 x 96 tests	1 x 96 tests
Human MMP1 Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent 50BS	1 x 20ml	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

機能	Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity.
配列類似性	Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains.
ドメイン	There are two distinct domains in this protein; the catalytic N-terminal, and the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases). The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.
翻訳後修飾	Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase.
細胞内局在	Secreted > extracellular space > extracellular matrix.

画像

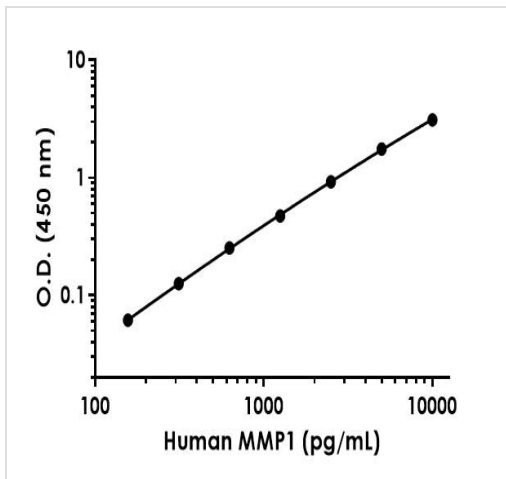


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



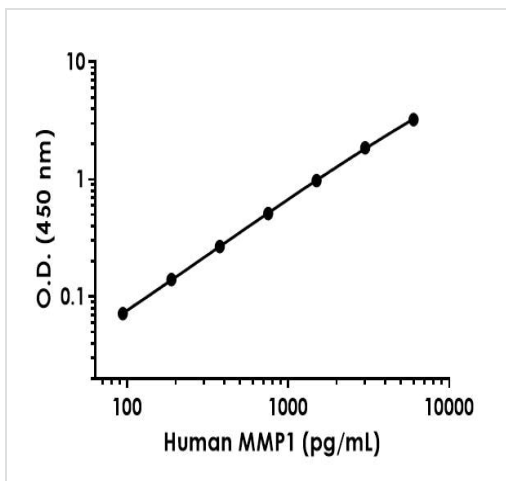
Background-subtracted data values (mean \pm SD) are graphed.

Example of human MMP1 standard curve in Sample Diluent NS.



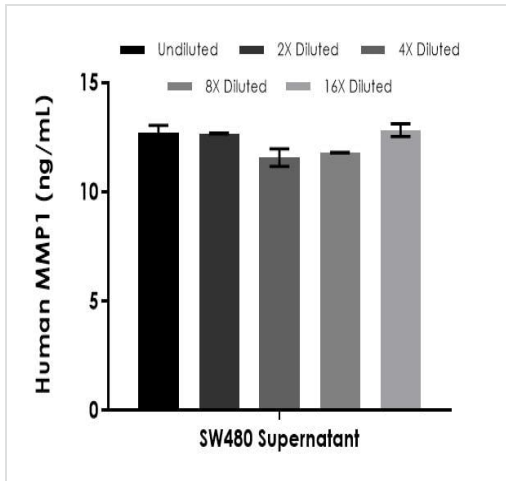
Background-subtracted data values (mean \pm SD) are graphed.

Example of human MMP1 standard curve in Sample Diluent 50BS.



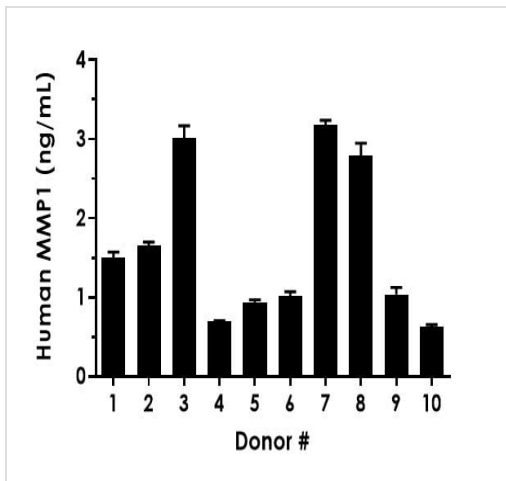
Background-subtracted data values (mean \pm SD) are graphed.

Example of human MMP1 standard curve in 1X Cell Extraction Buffer PTR.



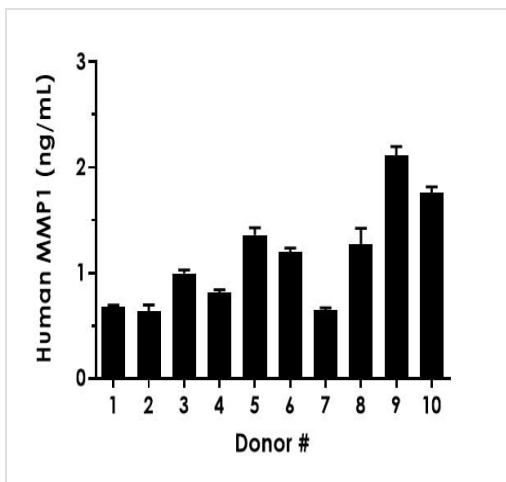
Interpolated concentrations of native MMP1 in SW480 cell culture supernatant samples.

The concentrations of MMP1 were measured in duplicates, interpolated from the MMP1 standard curves and corrected for sample dilution. Undiluted samples are as follows: SW480 supernatant 12.5%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean MMP1 concentration was determined to be 12.32 ng/mL in SW480 supernatant.



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

Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean MMP1 concentration was determined to be 1.65 ng/mL with a range of 0.612 – 3.22 ng/mL.



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

Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean MMP1 concentration was determined to be 1.15 ng/mL with a range of 0.589 – 2.17 ng/mL.

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Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Human MMP1 ELISA Kit
(ab215083)

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

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