abcam

Product datasheet

Rat MMP3 ELISA Kit ab270216

אעלשעבער SimpleStep ELISA

1 References 画像数4

製品の概要

Rat MMP3 ELISA Kit 製品名

検出方法 Colorimetric

再現性

サンブル	N	平均値	SD	CV%
Serum	8			3%

Inter-Assay(日差再現性)

特定サンプルでの回収試験

Intra-Assay(同時再現性)

サンプル	N	平均值	SD	CV%
Serum	3			3.5%

サンプルの種類 Serum

アッセイタイプ Sandwich (quantitative)

検出感度 42 pg/ml

検出範囲 273 pg/ml - 17500 pg/ml

添加回収試験

サンプルの種類	平均 %	測定範囲
Serum	90	86% - 93%
Hep Plasma	90	88% - 94%
Cit plasma	93	89% - 97%

1h 30m 全工程の試験時間

ステップ One step assay

種交差性 交差種: Rat

製品の概要 Rat MMP3 ELISA Kit (ab270216) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of MMP3 protein in serum. It uses our proprietary SimpleStep ELISA®

technology. Quantitate Rat MMP3 with 42 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.

特記事項

Matrix metalloprotease-3 (MMP3), also known as Stromelysin-1, is a 54 kD secreted protease involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling. It also has known roles in disease processes, such as arthritis and cancer metastasis. MMP3 functions by degrading fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and cartilage proteoglycans. These actions are linked to activation of procollagenase to further help in the remodeling of the extracellular matrix environment. Rat MMP3 shares 76.2%, 90.2%, and 75.1% sequence homology with human, mouse, and cow, respectively.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特性

保存方法

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

内容	1 x 96 tests
10X Rat MMP3 Capture Antibody	1 x 600µl
10X Rat MMP3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BR	1 x 6ml
Plate Seals	1 unit
Rat MMP3 Lyophilized Recombinant Protein	2 vials
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml

内容	1 x 96 tests	
TMB Development Solution	1 x 12ml	

機能 Can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and

cartilage proteoglycans. Activates procollagenase.

配列類似性 Belongs to the peptidase M10A family.

Contains 4 hemopexin-like domains.

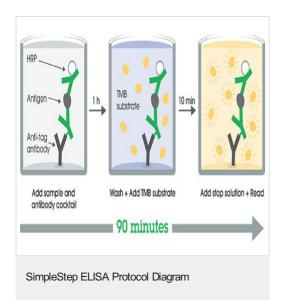
ドメイン The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus

inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-

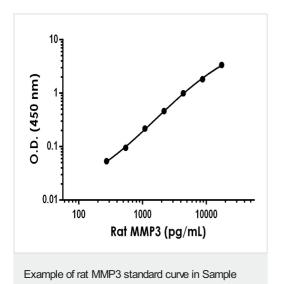
peptide release activates the enzyme.

細胞内局在 Secreted > extracellular space > extracellular matrix.

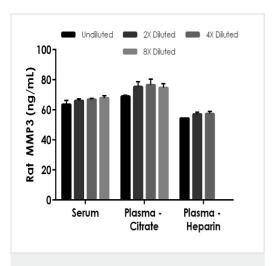
画像



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.

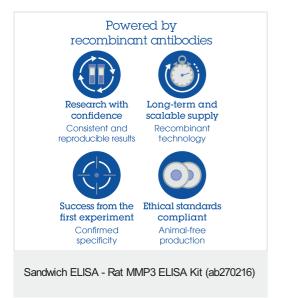


Diluent NS



Interpolated concentrations of native MMP3 in rat serum and plasma samples.

The concentrations of MMP3 were measured in duplicates, interpolated from the MMP3 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, and plasma (heparin) 12.5%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean MMP3 concentration was determined to be 66.05 ng/mL in serum, 73.89 ng/mL in plasma (citrate) and 56.23 ng/mL in plasma (heparin).



To learn more about the advantages of recombinant antibodies see **here**.

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