

Mouse/Rat FGF1 ELISA Kit ab223587

重组 SimpleStep ELISA

2 References [10 图像](#)

概述

产品名称 小鼠/大鼠FGF1 ELISA试剂盒

检测方法 Colorimetric

精确度 批次内

样品	n	Mean	SD	CV%
Brain tissue	5			2.7%

批次间

样品	n	Mean	SD	CV%
Brain tissue	3			3.7%

样品类型 Cell culture supernatant, Urine, Serum, EDTA Plasma, Cit plasma, Tissue Lysate

检测类型 Sandwich (quantitative)

灵敏度 2 pg/ml

范围 16 pg/ml - 1000 pg/ml

回收率 特定样本回收率

样品类型	平均%	范围
Urine	111	95% - 135%
Serum	116	111% - 119%
Cell culture media	117	108% - 125%
EDTA Plasma	105	102% - 109%
Cit plasma	119	111% - 125%
Tissue Lysate	118	105% - 126%

检测时间 1h 30m

实验步骤 One step assay

种属反应性 **与反应:** Mouse, Rat

产品概述 Mouse/Rat FGF1 ELISA Kit (ab223587) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of FGF1 protein in cit plasma, edta plasma, serum, tissue lysate, urine, and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse/Rat FGF1 with NULL NULL 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.

说明 FGF1, also known as Fibroblast Growth Factor 1 or FGF acidic, is an important activator for several signaling cascades with roles in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. It functions as potent mitogen in vitro. In the presence of heparin, FGF1 binds in a 1:2 stoichiometry with FGF1 receptor protein, causing the autophosphorylation and activation of the receptor. This complex then binds to integrin and recruits PTPN11 to begin FGF1 signaling. Because of its possible role in organ development and in tumor growth, FGF1 is an important subject of study for the treatment of diabetes and the diagnosis and treatment of cancer. Mouse and rat FGF1 are identical on an amino acid level.

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.

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
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

组件	1 x 96 tests
Antibody Diluent CPR	1 x 6ml
10X Mouse/Rat FGF1 Capture Antibody	1 x 600µl
10X Mouse/Rat FGF1 Detector Antibody	1 x 600µl
Mouse/Rat FGF1 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BS	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

功能

The heparin-binding fibroblast growth factors play important roles in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. They are potent mitogens in vitro.

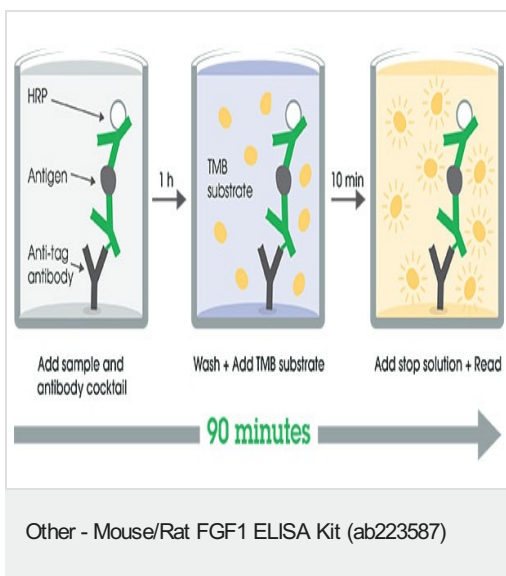
序列相似性

Belongs to the heparin-binding growth factors family.

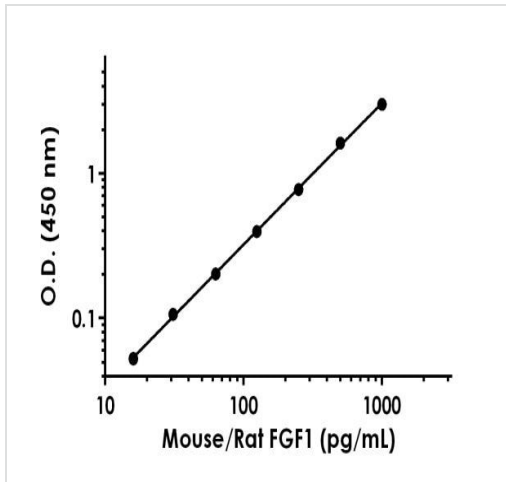
细胞定位

Secreted. Cytoplasm. Cytoplasm > cell cortex. Lacks a cleavable signal sequence. Within the cytoplasm, it is transported to the cell membrane and then secreted by a non-classical pathway that requires Cu(2+) ions and S100A13. Secreted in a complex with SYT1.

图片

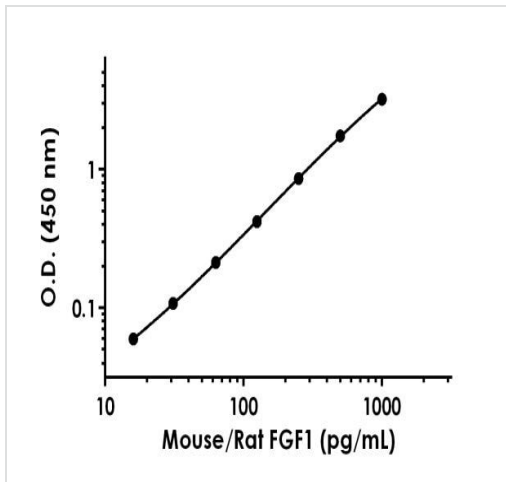


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



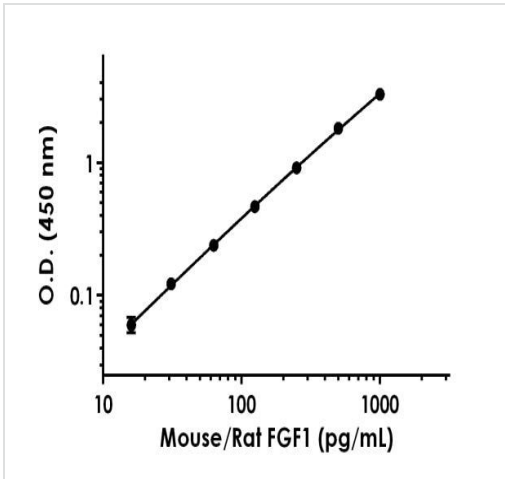
Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse/rat FGF1 standard curve in 1X Cell Extraction Buffer PTR.



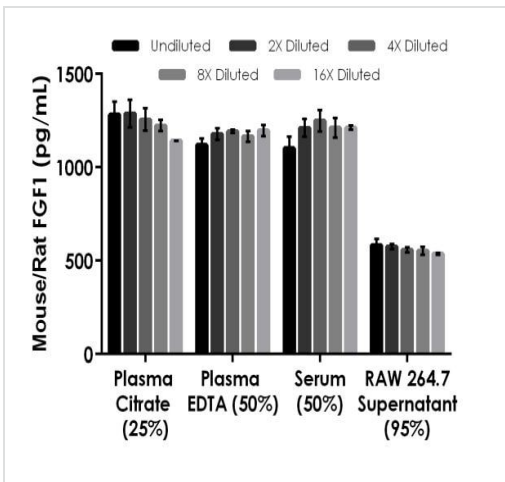
Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse/rat FGF1 standard curve in Sample Diluent NS.



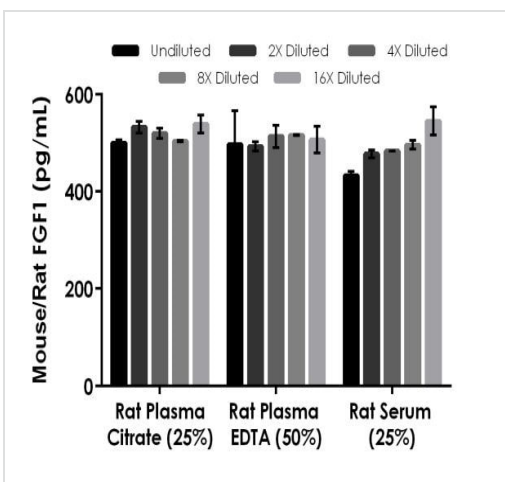
Example of mouse/rat FGF1 standard curve in Sample Diluent 25BS.

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



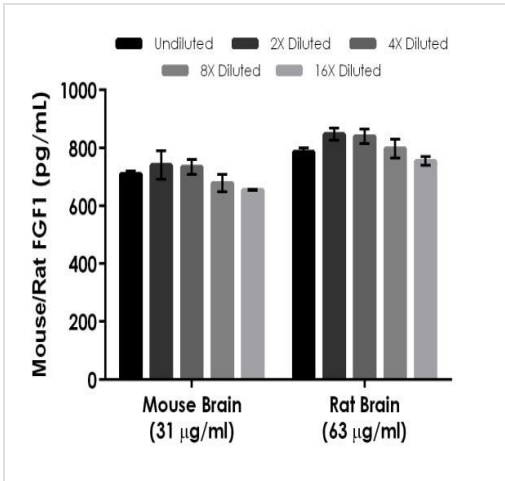
Interpolated concentrations of spiked mouse/rat FGF1 in mouse serum, plasma and cell culture supernatant samples.

The concentrations of FGF1 were measured in duplicates, interpolated from the FGF1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 25% and plasma (EDTA) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



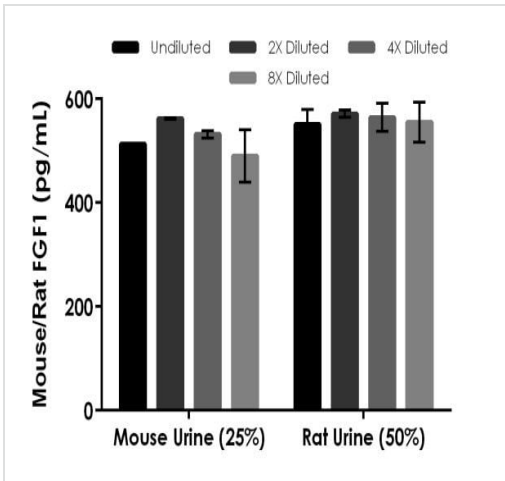
Interpolated concentrations of spiked mouse/rat FGF1 in rat serum and plasma samples.

The concentrations of FGF1 were measured in duplicates, interpolated from the FGF1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, plasma (EDTA) 50%, and RAW 264.7 supernatant 95%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



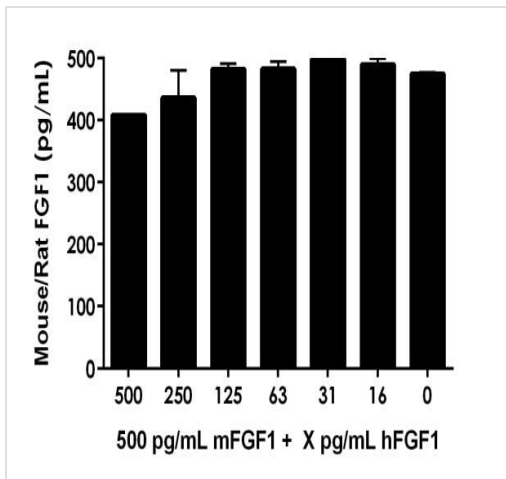
Interpolated concentrations of native mouse/rat FGF1 in mouse and rat brain tissue extract.

Interpolated concentrations of native mouse/rat FGF1 in mouse and rat brain tissue extract based on a 31 or 63 µg/mL extract load, respectively. The concentrations of FGF1 were measured in duplicate and interpolated from the FGF standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FGF1 concentration was determined to be 697 pg/mL in mouse brain tissue extract and 796 pg/mL in rat brain tissue extract.



Interpolated concentrations of spiked FGF1 in mouse and rat urine.

The concentrations of FGF1 were measured in duplicate and interpolated from the FGF1 standard curve and corrected for sample dilution. Undiluted samples are as follows: mouse urine 25%, rat urine 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Only 14% interference was observed with the highest dose of hFGF1.

Human FGF1 active protein (hFGF1) was added at the indicated concentrations to 500 pg/ml mouse FGF1 (mFGF1) to test for Interference.

Powered by recombinant antibodies

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Sandwich ELISA - Mouse/Rat FGF1 ELISA Kit (ab223587)

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

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