abcam

Product datasheet

Mouse IGF1 ELISA Kit ab240685

重组 SimpleStep ELISA

5 图像

概述

产品名称

小鼠IGF1 ELISA试剂盒

检测方法

Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Serum	8			5.2%

批次间

样品	n	Mean	SD	CV%
Serum	3			3%

样品类型 Cell culture supernatant, Serum, Hep Plasma, Cit plasma

检测类型 Sandwich (quantitative)

灵敏度 9.05 pg/ml

范围 56.25 pg/ml - 1800 pg/ml

回收率

特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	87	83% - 92%
Serum	100	93% - 107%
Hep Plasma	94	84% - 106%
Cit plasma	104	86% - 119%

检测时间 1h 30m

实验步骤 One step assay 种属反应性 与反应: Mouse

产品概述

Mouse IGF1 ELISA Kit (ab240685) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IGF1 protein in cell culture supernatant, cit plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse IGF1 with 9.05 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.

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 Mouse IGF1 Capture Antibody	1 x 600µl
10X Mouse IGF1 Detector Antibody	2 vials
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse IGF1 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
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 insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates

glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake.

疾病相关

Defects in IGF1 are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) [MIM:608747]. IGF1 deficiency is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness and mental retardation.

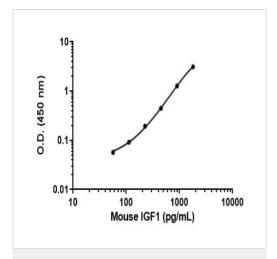
序列相似性

Belongs to the insulin family.

细胞定位

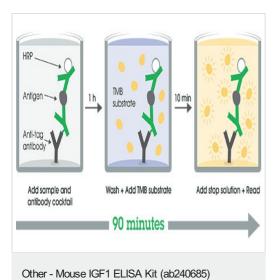
Secreted.

图片

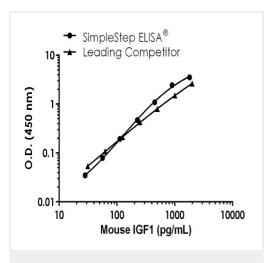


Example of mouse IGF1 standard curve in Sample Diluent NS.

The IGF1 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

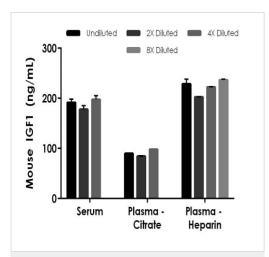


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Standard Curve comparison between mouse IGF1 SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.





Interpolated concentrations of native IGF1 in mouse serum and plasma samples.

The concentrations of IGF1 were measured in duplicates, interpolated from the IGF1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 0.5%, plasma (citrate) 1%, and plasma (heparin) 0.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IGF1 concentration was determined to be 188.98 ng/mL in serum, 90.88 ng/mL in plasma (citrate) and 217.88 ng/mL in and plasma (heparin).



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

(ab240685)

Sandwich ELISA - Mouse IGF1 ELISA Kit

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