abcam

Product datasheet

Human Amphiregulin ELISA Kit ab222504

重组 SimpleStep ELISA

2 References 5 图像

概述

产品名称 人Amphiregulin ELISA试剂盒

检测方法 Colorimetric

精确度 批次内

样品	n	Mean	SD	CV%
Amphiregulin	3			1.8%

批次间

样品	n	Mean	SD	CV%	
Amphiregulin	5			4.1%	

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

检测类型 Sandwich (quantitative)

灵敏度 1.2 pg/ml

范围 18 pg/ml - 600 pg/ml

回收率 特定样本回收率

样品类型	平均%	范围
Serum	106	84% - 117%
Cell culture media	108	106% - 110%
EDTA Plasma	98	91% - 104%
Cit plasma	103	93% - 111%

检测时间 1h 30m

实验步骤 One step assay 种属反应性 与反应: Human

产品概述

Human Amphiregulin ELISA Kit (ab222504) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Amphiregulin protein in cell culture supernatant, cit plasma, edta plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Amphiregulin with 2.4 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.

Amphiregulin is a member of the epidermal growth factor family encoded by the AREG gene. Amphiregulin is expressed as a 252- amino acid transmembrane glycoprotein, which contains an 81-amino acid N-terminal pro-peptide, a heparin binding domain, a EGF like domain, a 23-amino acid transmembrane domain, and a 31- amino acid cytoplasmic domain. The amphiregulin assay utilizes antibodies raised against the 101-187 amino acid region of the amphiregulin protein. Amphiregulin is an autocrine growth factor, a mitogen for several cell types, and is essential for mammary ductal development.

Pre-coated microplate (12 x 8 well strips)

说明

平台

性能

存放说明

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

组 件	1 x 96 tests
10X Human Amphiregulin Capture Antibody	1 x 600µl
10X Human Amphiregulin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human Amphiregulin Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
	,

组 件	1 x 96 tests
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

功能

Bifunctional growth-modulating glycoprotein. Inhibits growth of several human carcinoma cells in

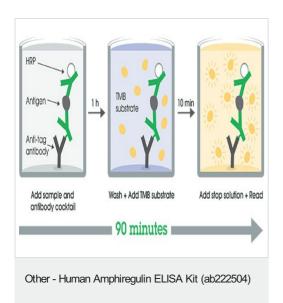
culture and stimulates proliferation of human fibroblasts and certain other tumor cells.

序列相似性 Belongs to the amphiregulin family.

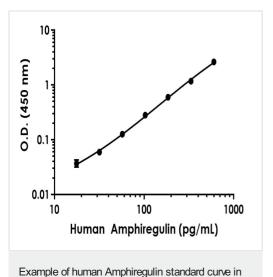
Contains 1 EGF-like domain.

细胞定位 Membrane.

图片

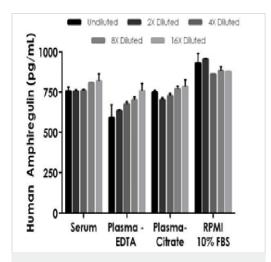


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



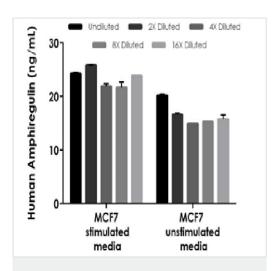
Sample Diluent NS

The Amphiregulin 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.



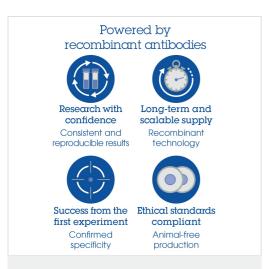
Interpolated concentrations of spiked Amphiregulin in human serum, plasma and cell culture supernatant samples.

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



Interpolated concentrations of native Amphiregulin in human MCF7 cell culture supernatant.

Human MCF7s were stimulated with 2% PHA for 3 days before the supernatant was collected and assayed. The concentrations of Amphiregulin were measured in duplicate and interpolated from the Amphiregulin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Amphiregulin concentration was determined to be 23.7 ng/mL in stimulated and 16 ng/mL in unstimulated MCF7 cell culture supernatant.



Sandwich ELISA - Human Amphiregulin ELISA Kit

(ab222504)

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

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