abcam

Product datasheet

Mouse Amphiregulin ELISA Kit ab224882

Recombinant SimpleStep ELISA

4 Images

Overview

Product name

Detection method

Precision

Recovery

Mouse Amphiregulin ELISA Kit

Colorimetric

SD Sample CV% Mean n RPMI medium 5 4.7%

Inter-assay

Sample specific recovery

Intra-assay

Sample	n	Mean	SD	CV%
RPMI medium	3			8%

Sample type Cell culture supernatant Assay type Sandwich (quantitative)

Sensitivity 30 pg/ml

Range 156.3 pg/ml - 10000 pg/ml

Sample type	Average %	Range
Cell culture supernatant	88	85% - 91%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse

Product overview Mouse Amphiregulin ELISA Kit (ab224882) is a single-wash 90 min sandwich ELISA designed

> for the quantitative measurement of Amphiregulin protein in cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Amphiregulin with 30 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.

Notes

Amphiregulin is a member of the epidermal growth factor family encoded by the AREG gene. Mature Amphiregulin is a 148-amino acid single-pass membrane glycoprotein. Amphiregulin is an autocrine growth factor, a mitogen for several cell types, and is essential for mammary ductal development. Amphiregulin interacts with epidermal growth factor receptor to promote growth of epithelial cells.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

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

Components	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
10X Mouse Amphiregulin Capture Antibody	1 x 600µl
10X Mouse Amphiregulin Detector Antibody	1 x 600µl
Mouse Amphiregulin 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

Function

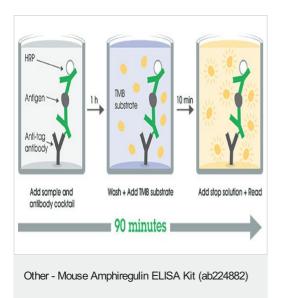
Bifunctional growth-modulating glycoprotein. Inhibits growth of several human carcinoma cells in culture and stimulates proliferation of human fibroblasts and certain other tumor cells.

Sequence similarities

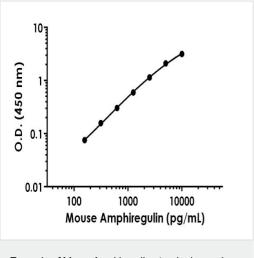
Belongs to the amphiregulin family.

Contains 1 EGF-like domain.

Images

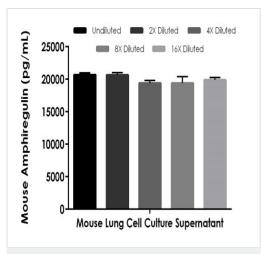


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



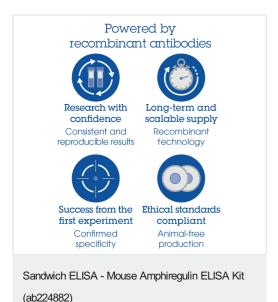
Background-subtracted data values (mean +/- SD) are graphed.

Example of MouseAmphiregulin standard curve in Sample Diluent NS.



Interpolated concentrations of native Amphiregulin in Mouse lung 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: lung cell culture supernatant 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Amphiregulin concentration was determined to be 20 ng/mL in neat lung cell culture supernatant.



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

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