abcam

Product datasheet

Mouse Angiogenin ELISA Kit ab208349

重组 SimpleStep ELISA

4 References 5 图像

概述

产品名称 小鼠Angiogenin ELISA试剂盒

检测方法 Colorimetric

精确度

批次内

| 样品 | n | Mean | SD | CV% |
|-------|---|------|----|------|
| serum | 8 | | | 2.3% |

批次间

| 样品 | n | Mean | SD | CV% | |
|-------|---|------|----|------|--|
| serum | 3 | | | 2.6% | |

样品类型 Cell culture supernatant, Serum, Plasma

检测类型 Sandwich (quantitative)

灵敏度 16.7 pg/ml

范围 62.5 pg/ml - 4000 pg/ml

回收率

特定样本回收率

| 样品类型 | 平均% | 范围 |
|--------------------|-----|-------------|
| Serum | 106 | 105% - 107% |
| Cell culture media | 101 | 100% - 103% |
| Hep Plasma | 106 | 104% - 108% |
| EDTA Plasma | 107 | 105% - 110% |
| Cit plasma | 102 | 92% - 110% |

检测时间 1h 30m

实验步骤 One step assay

种属反应性

与反应: Mouse

不与反应: Goat, Cow, Pig

产品概述

Mouse Angiogenin ELISA Kit (ab208349) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Angiogenin protein in cell culture supernatant, serum, and plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Angiogenin with 16.7 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.

说明

Mouse Angiogenin is a member of the pancreatic ribonuclease A superfamily and is a potent inducer of neovascularization. Furthermore, Angiogenin is essential for cell growth and proliferation. Angiogenin direct binding to the promoter region of ribosomal DNA induces ribosomal RNA transcription and cell proliferation required for ribosomal biogenesis and the action of angiogenic factors. Increased Angiogenin serum levels have been associated with the incidence and severity of several types of tumors. Mouse Angiogenin is 145 amino acids (aa) in length, with a 24 aa signal peptide, and contains three intra-chain disulfide bonds. Human and rat Angiogenin are 74% and 83% identical to mouse Angiogenin, respectively.

平台

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 Angiogenin Capture Antibody | 1 x 600µl |
| 10X Mouse Angiogenin Detector Antibody | 1 x 600µl |
| 10X Wash Buffer PT (ab206977) | 1 x 20ml |
| Antibody Diluent 5BI | 1 x 6ml |
| Mouse Angiogenin Recombinant Lyophilized Protein | 2 vials |
| Plate Seals | 1 unit |

| 组 件 | 1 x 96 tests |
|---|--------------|
| 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 |

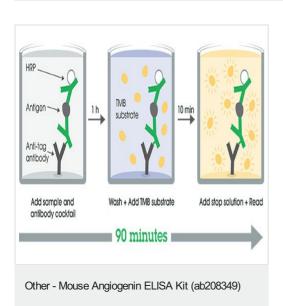
相关性

Angiogenin is a member of the ribonuclease superfamily with approximately 35% amino acid sequence identity with pancreatic RNase. Like other members of the ribonuclease superfamily, angiogenin is a cytotoxic agent that can eliminate cellular protein synthesis. Angiogenin causes inhibition of protein synthesis by functioning as a cytotoxic tRNA-specific RNase. Angiogenesis is the formation of blood vessels or capillaries from existing blood vessels due to specific signals. Angiogenin induces the growth of new blood vessels. It stimulates capillary and umbilical vein endothelial cells to produce diacylglycerol and secrete prostacyclin by phospholipase activation. Angiogenin exhibits both angiogenic and non-angiogenic activities and is involved in endothelial cell migration, proliferation, and differentiation. It is produced by a variety of tumor and normal cell types. Cells that express angiogenin include vascular endothelial and smooth muscle cells, fibroblasts, normal colonic epithelium, normal peripheral blood lymphocytes, lung and colonic epithelial tumor cell lines, and primary gastrointestinal adenocarcinomas. Angiogenin is also present in normal human plasma.

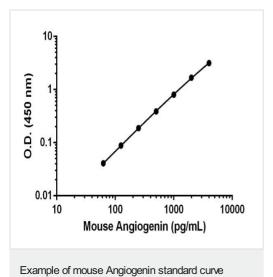
细胞定位

Nuclear and Secreted

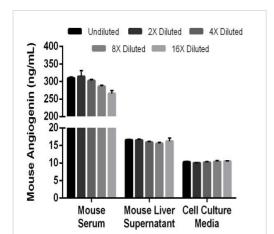
图片



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.

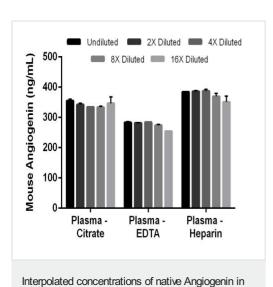


Background-subtracted data values (mean +/- SD) are graphed.



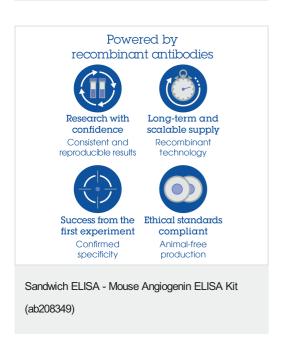
Interpolated concentrations of native Angiogenin in mouse serum and mouse liver supernatant and spiked recombinant Angiogenin in cell culture media

The concentrations of Angiogenin were measured in duplicates, interpolated from the Angiogenin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1.25%, mouse liver supernatant 20% and cell culture media 20%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Angiogenin concentration was determined to be 295.7 ng/mL in serum, 16.2 ng/mL in mouse liver supernatant and 10.3 ng/mL in cell culture media. Mouse liver was cultured for 5 days in RPMI base media with 10% fetal bovine serum and supernatants were collected according to section 11.3.



mouse plasma samples

The concentrations of Angiogenin were measured in duplicates, interpolated from the Angiogenin standard curves and corrected for sample dilution. Undiluted samples are as follows: plasma (citrate) 1%, plasma (EDTA) 1.25%, and plasma (heparin) 1%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Angiogenin concentration was determined to be 342.4 ng/mL in plasma (citrate), 275.4 ng/mL in plasma (EDTA) and 375.6 ng/mL in plasma (heparin).



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

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