abcam

Product datasheet

Mouse Angiopoietin 2 ELISA Kit ab209883

Recombinant SimpleStep ELISA

3 References 4 Images

Overview

Product name Mouse Angiopoietin 2 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Mouse plasma	3			8.3%

Inter-assay

Sample	n	Mean	SD	CV%
Mouse plasma	5			10.3%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 17.3 pg/ml

Range 68.75 pg/ml - 4400 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	94.5	67.4% - 120.9%
Cell culture media	99.7	94.3% - 103.3%
Hep Plasma	112.4	81.4% - 143.2%
EDTA Plasma	104.9	91.8% - 122.8%
Cit plasma	94.7	87.1% - 103.3%

Assay time 1h 30m

Assay duration One step assay

Species reactivity

Reacts with: Mouse
Does not react with: Cow

Product overview

Mouse Angiopoietin 2 ELISA Kit (ab209883) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Angiopoietin 2 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Angiopoietin 2 with 17.3 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 (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes

Angiopoietin 2 is a secreted glycosylated protein functioning in angiogenesis, inflammation and vascular development. Angiopoietin 2 binds to receptor tyrosine kinase TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signalling. Angiopoietin 2 can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, Angiopoietin 2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, Angiopoietin 2 may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal.

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 Mouse Angiopoietin 2 Capture Antibody	1 x 600µl
10X Mouse Angiopoietin 2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse Angiopoietin 2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

Components	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

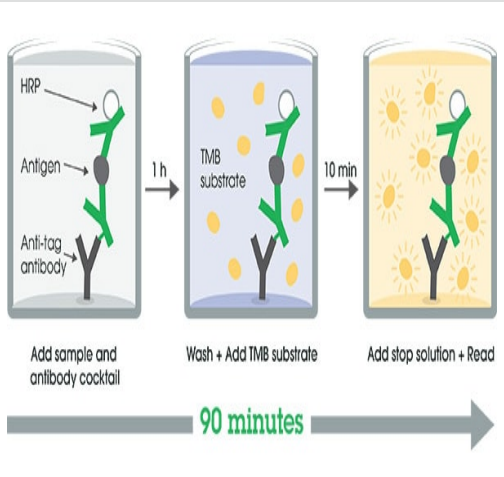
Function Can induce tyrosine phosphorylation of TIE2. Binds to TIE2 receptor and counteracts blood vessel maturation/stability mediated by angiopoietin-1. Its function may be context-dependent. In the absence of angiogenic inducers, such as VEGF, ANG2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal.

Sequence similarities Contains 1 fibrinogen C-terminal domain.

Domain The Fibrinogen C-terminal domain mediates interaction with the TEK/TIE2 receptor.

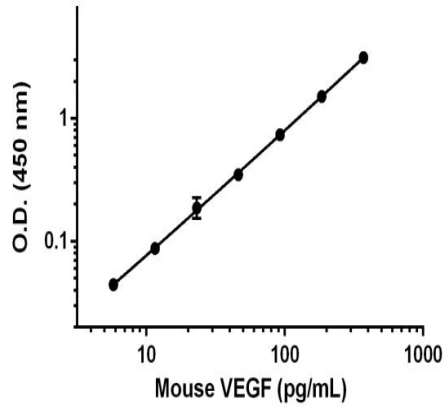
Cellular localization Secreted.

Images



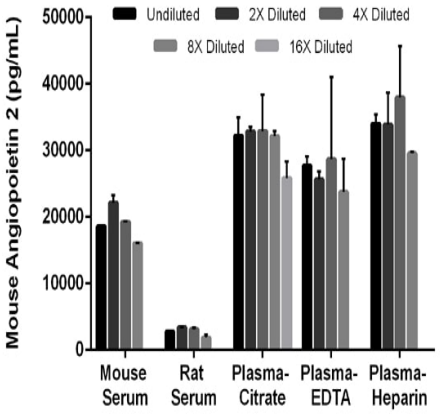
Other - Mouse Angiopoietin 2 ELISA Kit (ab209883)

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.



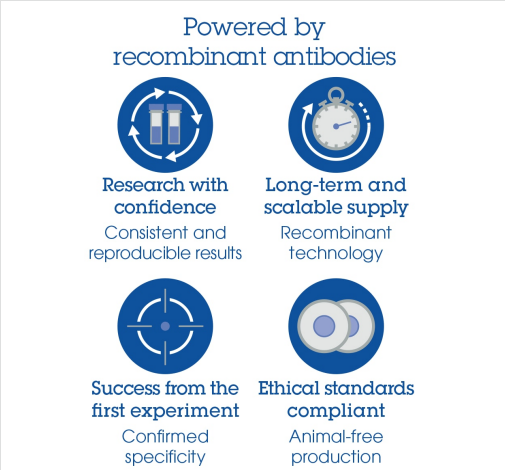
Example of mouse Angiopoietin 2 standard curve

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



Interpolated concentrations of native Angiopoietin 2 in mouse and rat serum and mouse plasma samples

The concentrations of Angiopoietin 2 were measured in duplicates, interpolated from the Angiopoietin 2 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 6%, plasma (EDTA) 7.5%, plasma (heparin) 7.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Angiopoietin 2 concentration was determined to be 19,017 pg/mL in mouse serum, 2,802 pg/mL in rat serum, 31,192 pg/mL in mouse plasma (citrate), 26,451 pg/mL in mouse plasma (EDTA) and 33,857 pg/mL in mouse plasma (heparin).



Sandwich ELISA - Mouse Angiopoietin 2 ELISA Kit (ab209883)

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

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