

Product datasheet

Mouse Angiopoietin 2 ELISA Kit ab209883

SimpleStep ELISA[®]

[1 References](#) [3 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, Heparin Plasma, EDTA Plasma, Citrate 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%
Heparin Plasma	112.4	81.4% - 143.2%
EDTA Plasma	104.9	91.8% - 122.8%
Citrate Plasma	94.7	87.1% - 103.3%

Assay time 1h 30m

Assay duration	One step assay
Species reactivity	Reacts with: Mouse, Rat Does not react with: Cow, Human
Product overview	<p>Abcam's Angiotensin 2 (ANG2) <i>in vitro</i> SimpleStep ELISA® (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Angiotensin 2 protein in mouse serum, plasma and cell culture supernatants samples.</p> <p>The SimpleStep ELISA® employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. TMB substrate is added and during incubation is catalyzed by HRP, generating blue coloration. This reaction is then stopped by addition of Stop Solution completing any color change from blue to yellow. Signal is generated proportionally to the amount of bound analyte and the intensity is measured at 450 nm. Optionally, instead of the endpoint reading, development of TMB can be recorded kinetically at 600 nm.</p>
Notes	<p>Angiotensin 2 is a secreted glycosylated protein functioning in angiogenesis, inflammation and vascular development. Angiotensin 2 binds to receptor tyrosine kinase TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signalling. Angiotensin 2 can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, Angiotensin 2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, Angiotensin 2 may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal.</p>
Tested applications	Suitable for: Sandwich ELISA
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 Angiotensin 2 Capture Antibody	1 x 600µl
10X Mouse Angiotensin 2 Detector Antibody	1 x 600µl
Mouse Angiotensin 2 Lyophilized Recombinant Protein	2 vials
Antibody Diluent 4BR	1 x 6ml
10X Wash Buffer PT (ab206977)	1 x 20ml
TMB Development Solution	1 x 12ml
Stop Solution	1 x 12ml

Components	1 x 96 tests
Sample Diluent NS	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 x 96 tests
Plate Seals	1 unit

Function Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2-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.

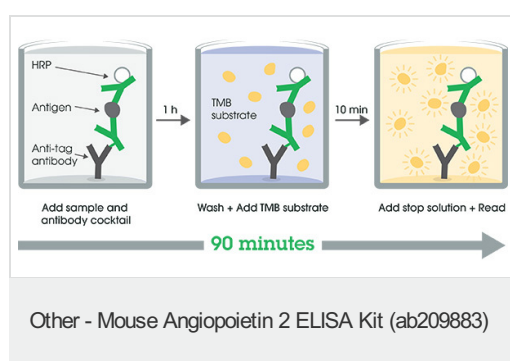
Applications

Our [Abpromise guarantee](#) covers the use of **ab209883** in the following tested applications.

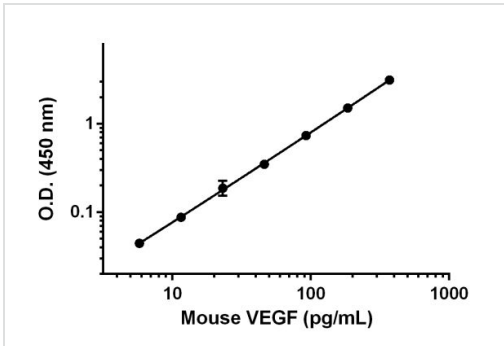
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images

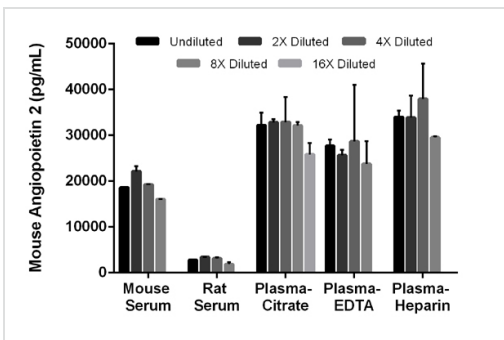


ELISA Protocol Summary



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

Example of mouse Angiopoietin 2 standard curve



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).

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

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors