abcam

Product datasheet

Mouse Annexin A2 ELISA Kit ab210576

Recombinant SimpleStep ELISA

8 Images

Overview

Product name

Detection method

Precision

Mouse Annexin A2 ELISA Kit

Colorimetric

Sample Mean SD CV% n

heart ext 5 3.1%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
heart ext	3			5.8%

Sample type

Assay type

Sensitivity

Range

Recovery

Cell culture supernatant, Serum, Plasma, Cell culture extracts, Tissue Extracts, Cell culture media

Sandwich (quantitative)

17 pg/ml

78.13 pg/ml - 5000 pg/ml

Sample specific recovery

Sample type	Average %	Range
Serum	97	90% - 101%
Cell culture extracts	112	109% - 114%
Tissue Extracts	101	89% - 110%
Cell culture media	113	106% - 120%
Hep Plasma	84	83% - 86%
Cit plasma	87	84% - 89%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse

Product overviewMouse Annexin A2 ELISA Kit (ab210576) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Annexin A2 protein in cell culture supernatant, plasma, serum,

ELISA® technology. Quantitate Mouse Annexin A2 with 17 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:

tissue extracts, cell culture media, and cell culture extracts. It uses our proprietary SimpleStep

- 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.

Annexin A2 is a secreted 36 kDa calcium-dependent phospholipid-binding protein localized on the surface of most eukaryotic cells. Annexin A2 is involved in several biological processes, including anti-inflammatory effects, Ca²⁺-dependent exocytosis, immune responses, Ca²⁺ transport and phospholipase A2 regulation. Annexin A2 forms a heterotetramer containing 2 light chains of S100A10/p11 and 2 heavy chains of Annexin A2/p36. Annexin A2 binds two calcium ions with high affinity. Annexin A2 inhibits PCSK9-enhanced LDLR degradation, probably reduces PCSK9 protein levels via a translational mechanism but also competes with LDLR for binding with PCSK9.

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It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Microplate (12 x 8 well strips)

Platform

Properties

Storage instructions

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

Components	1 x 96 tests
10X Mouse Annexin A2 Capture Antibody	1 x 600µl
10X Mouse Annexin A2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

Notes

Components	1 x 96 tests
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Mouse Annexin A2 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 Calcium-regulated membrane-binding protein whose affinity for calcium is greatly enhanced by

anionic phospholipids. It binds two calcium ions with high affinity. May be involved in heat-stress

response.

Sequence similarities Belongs to the annexin family.

Contains 4 annexin repeats.

Domain A pair of annexin repeats may form one binding site for calcium and phospholipid.

Post-translational Phosphorylation of Tyr-24 enhances heat stress-induced translocation to the cell surface.

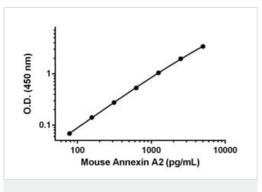
modifications ISGylated.

Cellular localization Secreted > extracellular space > extracellular matrix > basement membrane. Melanosome. In the

> lamina beneath the plasma membrane. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Translocated from the cytoplasm to the cell surface through a Golgi-

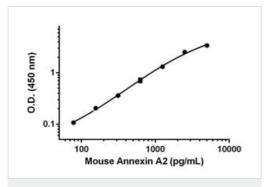
independent mechanism.

Images



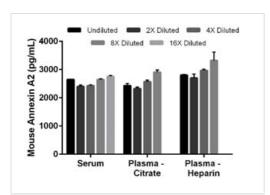
Example of mouse Annexin A2 standard curve in 1X Cell Extraction Buffer PTR.

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

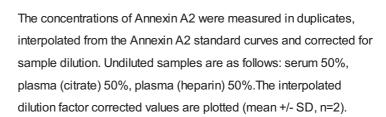


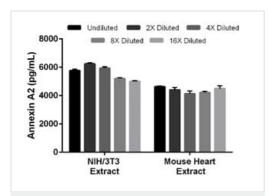
Example of mouse Annexin A2 standard curve in Sample Diluent NS.

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



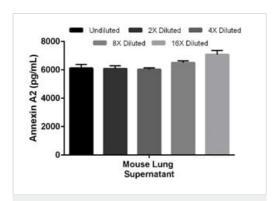
Interpolated concentrations of spiked Annexin A2 in mouse serum and plasma samples.





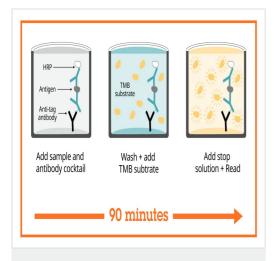
Interpolated concentrations of native Annexin A2 in mouse NIH/3T3 cell extract samples based on 1 μ g/mL extract load and in mouse heart extract samples based on 25 μ g/mL extract load.

The concentrations of Annexin A2 were measured in duplicate and interpolated from the Annexin A2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Annexin A2 concentration was determined to be 5,627 pg/mL in NIH/3T3 cell extract and 8,735 pg/mL in mouse heart extract samples.



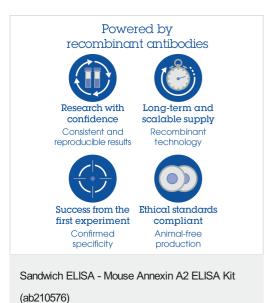
Interpolated concentrations of native Annexin A2 in mouse lung day 5 cell culture supernatant sample.

The concentrations of Annexin A2 were measured in duplicate and interpolated from the Annexin A2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Annexin A2 concentration was determined to be 6,362 pg/mL in neat mouse lung supernatant sample.

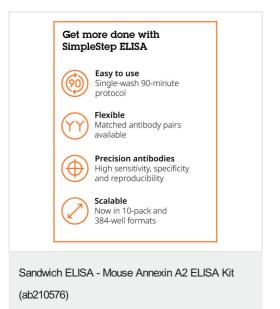


Sandwich ELISA - Mouse Annexin A2 ELISA Kit (ab210576)

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.



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



To learn more about the advantages of SimpleStep ELISA[®] kits see **here**.

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