abcam

Product datasheet

Mouse Periostin ELISA Kit ab243689

Recombinant SimpleStep ELISA

7 Images

Overview

Product name Mouse Periostin ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
serum	5			2.2%

Inter-assay

Sample	n	Mean	SD	CV%
serum	3			4.5%

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

Assay type Sandwich (quantitative)

Sensitivity 22.1 pg/ml

Range 93.75 pg/ml - 7000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	96	92% - 102%
Serum	100	95% - 106%
Hep Plasma	107	104% - 108%
EDTA Plasma	107	99% - 112%
Cit plasma	102	98% - 105%

Assay time 1h 30m

Assay duration One step assay

Species reactivity

Reacts with: Mouse

Product overview

Mouse Periostin ELISA Kit (ab243689) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Periostin protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Periostin with 22.1 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.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

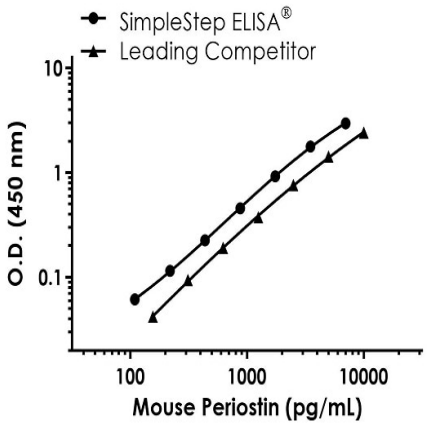
Storage instructions

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

Components	1 x 96 tests
10X Mouse Periostin Capture Antibody	1 x 600µl
10X Mouse Periostin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BR	1 x 6ml
Mouse Periostin Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 50BS	1 x 20ml
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

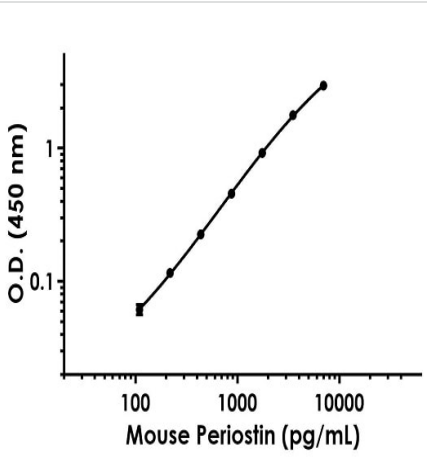
Function	Binds to heparin. Induces cell attachment and spreading and plays a role in cell adhesion. May play a role in extracellular matrix mineralization.
Tissue specificity	Widely expressed with highest levels in aorta, stomach, lower gastrointestinal tract, placenta, uterus and breast. Up-regulated in epithelial ovarian tumors. Not expressed in normal ovaries. Also highly expressed at the tumor periphery of lung carcinoma tissue but not within the tumor. Overexpressed in breast cancers.
Sequence similarities	Contains 1 EMI domain. Contains 4 FAS1 domains.
Post-translational modifications	Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



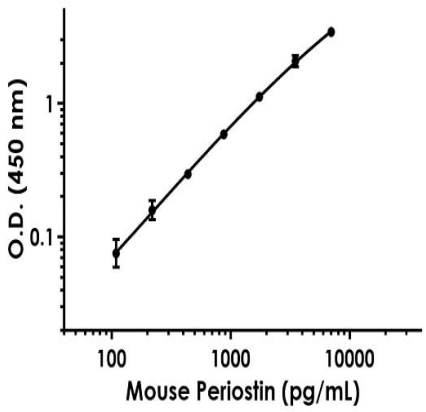
Mouse Periostin Standard Curve Comparison.

Standard Curve comparison between mouse Periostin SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



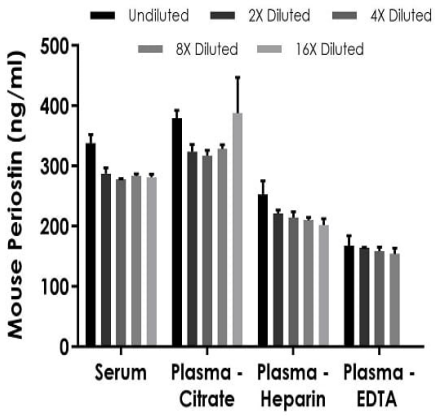
Example of mouse Periostin standard curve in Sample Diluent NS.

The Periostin standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



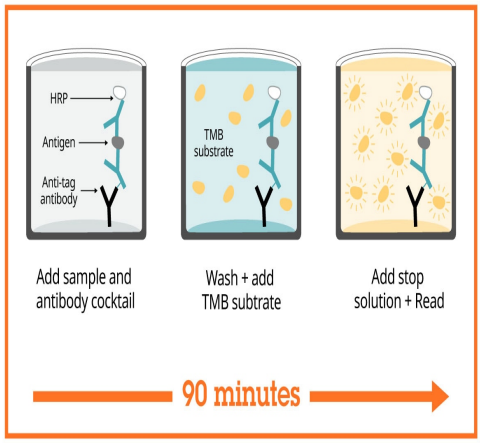
Example of mouse Periostin standard curve in Sample Diluent 50BS.

The Periostin standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



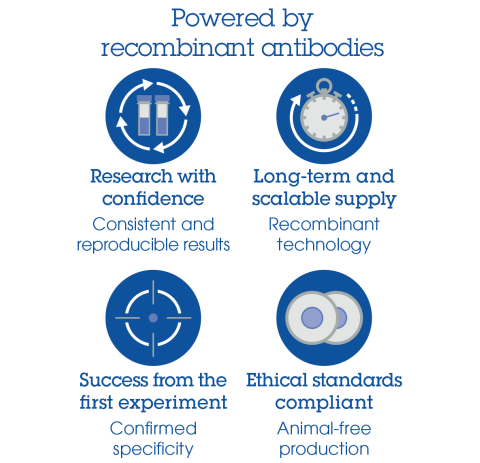
Interpolated concentrations of native Periostin in mouse serum and plasma samples.

The concentrations of Periostin were measured in duplicates, interpolated from the Periostin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1: 100, plasma (citrate) 1: 100, plasma (heparin) 1: 100, and plasma (EDTA) 1: 100. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Periostin concentration was determined to be 293.6 ng/mL in serum, 347.4 ng/mL in plasma (citrate), 219.8 ng/ml in plasma (heparin), and 161.1 ng/ml in plasma (EDTA).



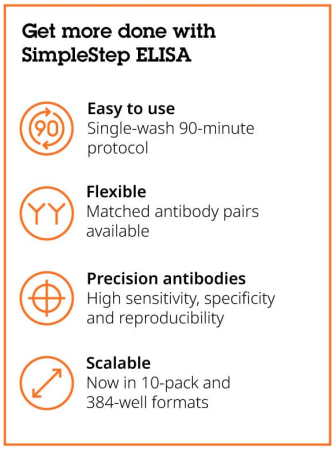
Sandwich ELISA - Mouse Periostin ELISA Kit (ab243689)

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.



Sandwich ELISA - Mouse Periostin ELISA Kit (ab243689)

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



Sandwich ELISA - Mouse Periostin ELISA Kit (ab243689)

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

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