abcam

Product datasheet

# Mouse Resistin ELISA Kit ab205574

Recombinant SimpleStep ELISA

2 References 9 Images

## Overview

**Product name** Mouse Resistin ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

| Sample | n | Mean | SD | CV% |
|---|---|---|---|---|
| Serum | 8 | | | 5.1% |

Inter-assay

| Sample | n | Mean | SD | CV% |
|---|---|---|---|---|
| Serum | 3 | | | 7.5% |

**Sample type** Cell culture supernatant, Serum, Plasma, Cell culture extracts, Tissue Extracts

**Assay type** Sandwich (quantitative)

**Sensitivity** 6.5 pg/ml

**Range** 31.25 pg/ml - 2000 pg/ml

**Recovery**

Sample specific recovery

| Sample type | Average % | Range |
|---|---|---|
| Serum | 91 | 88% - 95% |
| Cell culture media | 100 | 98% - 103% |
| Hep Plasma | 104 | 100% - 111% |
| EDTA Plasma | 95 | 90% - 103% |
| Cit plasma | 109 | 106% - 115% |

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity**

**Reacts with:** Mouse
**Does not react with:** Pig

**Product overview**

Mouse Resistin ELISA Kit (ab205574) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Resistin protein in cell culture extracts, cell culture supernatant, plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Resistin with 6.5 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**

Mouse Resistin (RETN), also described as ADSF (Adipose Tissue-Specific Secretory Factor) and FIZZ3 (Found in Inflammatory Zone), is a peptide hormone belonging to the class of cysteine-rich secreted proteins which is termed the RELM family. Mouse Resistin is a 114-amino acid (aa) peptide (with a 20 aa signal sequence and a 94 aa mature segment) containing 11 cysteines that allow the association of several Resistin monomers into macromolecular complexes. Mouse Resistin is 75% and 56% identical to rat and human Resistin, respectively.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
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.

**Platform**

Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions**

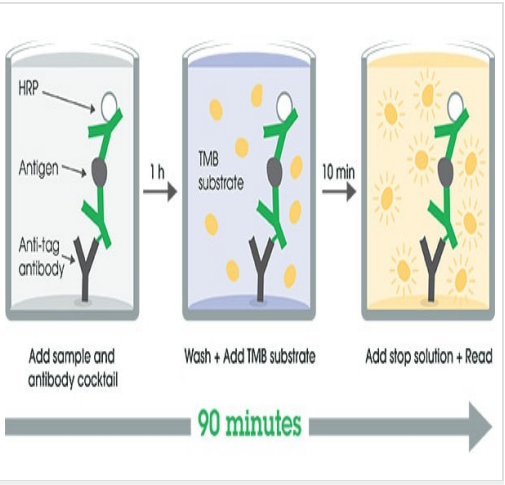
Store at +4°C. Please refer to protocols.

| Components | 1 x 96 tests |
|---|---|
| 10X Mouse Resistin Detector Antibody | 1 x 600µl |
| 10X Wash Buffer PT (ab206977) | 1 x 20ml |
| 50X Cell Extraction Enhancer Solution (ab193971) | 1 x 1ml |
| 5X Cell Extraction Buffer PTR (ab193970) | 1 x 10ml |
| Antibody Diluent 4BI | 1 x 6ml |

| Components | 1 x 96 tests |
|---|---|
| Mouse Resistin Capture Antibody (Lyophilized) | 1 vial |
| Mouse Resistin 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 |

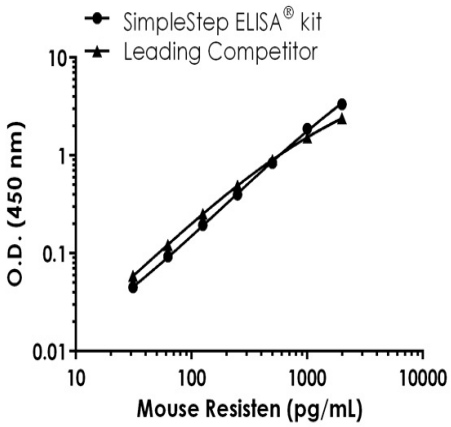
| | |
|---|---|
| **Function** | Hormone that seems to suppress insulin ability to stimulate glucose uptake into adipose cells. Potentially links obesity to diabetes. |
| **Tissue specificity** | Expressed only in fatty tissues. |
| **Sequence similarities** | Belongs to the resistin/FIZZ family. |
| **Cellular localization** | Secreted. |

## Images



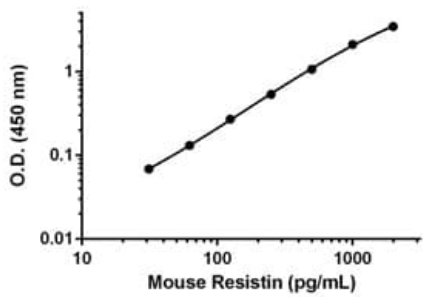

Other - Mouse Resistin ELISA Kit (ab205574)

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.



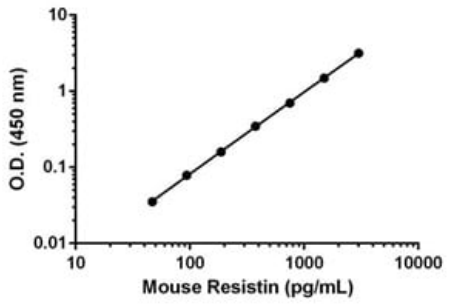

Mouse Resistin standard curve comparison data.

Standard curve comparison between mouse Resistin SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity with shorter protocol time.



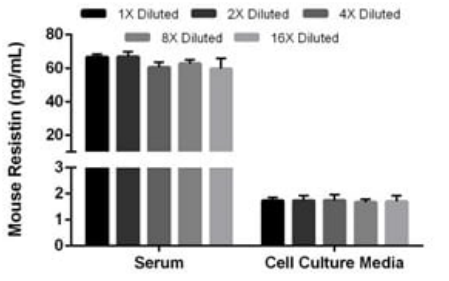

Example of the mouse Resistin standard curve in Sample Diluent NS.

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



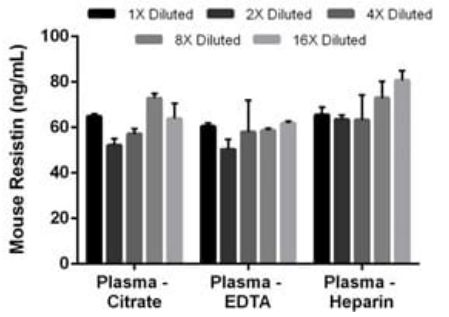

Example of the mouse Resistin standard curve in 1X Cell Extraction Buffer PTR.

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



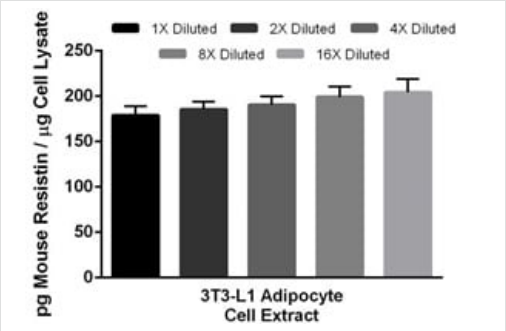

Linearity of dilution of mouse Resistin in serum and cell culture media.

Native mouse Resistin was measured in 2.5% mouse serum diluted in a 2-fold dilution series in Sample Diluent NS. Recombinant mouse Resistin was spiked into 10% cell culture media and diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse Resistin were measured in duplicate and interpolated from the mouse Resistin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).



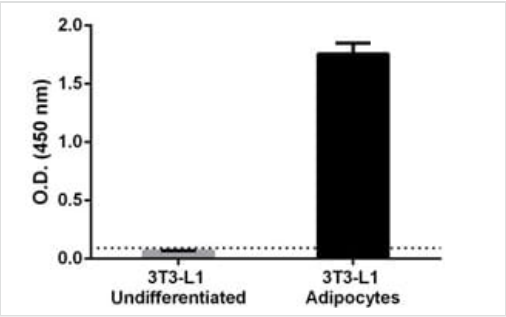

Linearity of dilution of mouse Resistin in plasma samples.

Native mouse Resistin was measured in 2.5% mouse plasma citrate, mouse plasma EDTA, and mouse plasma heparin samples diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse Resistin were measured in duplicate and interpolated from the mouse Resistin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).



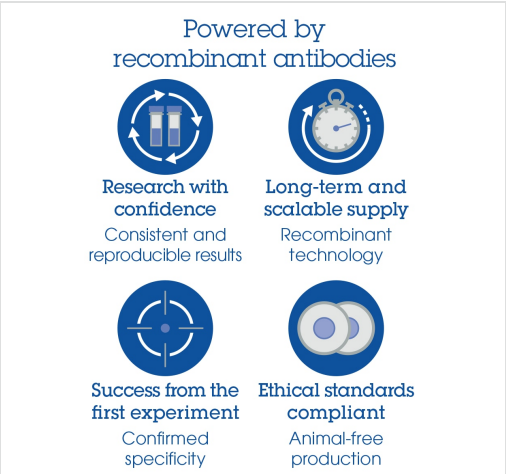

Linearity of mouse Resistin in 3T3-L1 adipocyte cell extract.

Native mouse Resistin was measured in 10 µg/mL of 3T3-L1 adipocyte cell extract diluted in a 2-fold dilution series in 1X Cell Extraction Buffer PTR. The concentrations of mouse Resistin were measured in duplicate and interpolated from the mouse Resistin standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).




Assay specificity is demonstrated on 3T3-L1 cells.

3T3-L1 cells were cultured in the presence and absence 1 µM Dexamethasone, 0.5 mM IBMX, 1 µg/mL insulin for 10 days to generate adipocytes and undifferentiated cells respectively. At the end of the treatment, protein extraction was carried out according to section 11.4 of the booklet. Both 3T3-L1 adipocytes and undifferentiated cell extracts were measured in duplicate at 10 µg/mL using this kit. The Raw O.D. values for each sample are graphed, with the background O.D. shown as the dashed line. The 3T3-L1 adipocytes were measured at 179 pg of Resistin/µg of cell lysate, whereas the 3T3-L1 undifferentiated cells measured below the limit of detection for this assay.




Sandwich ELISA - Mouse Resistin ELISA Kit (ab205574)

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

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