

Product datasheet

Mouse Milk Fat Globule 1 ELISA Kit ab208981

Recombinant SimpleStep ELISA[®]

[8 Images](#)

Overview

Product name Mouse Milk Fat Globule 1 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	5			2.7%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			5.1%

Sample type

Cell culture supernatant, Serum, Cell culture extracts, Tissue Extracts, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

3 pg/ml

Range

101.56 pg/ml - 6500 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	98.8	87.4% - 107.1%
Cell culture media	120.5	116.1% - 127%
Hep Plasma	80.8	78.4% - 80.4%
EDTA Plasma	93.5	90.1% - 98.4%
Cit plasma	82.7	74.3% - 88.7%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	Reacts with: Mouse Does not react with: Goat, Cow, Pig

Product overview Mouse Milk Fat Globule 1 ELISA Kit (ab208981) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Milk Fat Globule 1 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Milk Fat Globule 1 with 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 Milk Fat Globule 1 is a secreted glycoprotein with functions in mammary gland morphogenesis, angiogenesis and tumor progression. Milk Fat Globule 1 contributes to phagocytic removal of apoptotic cells in many tissues. It is a specific ligand for the alpha-v/beta-3 and alpha-v/beta-5 receptors. It also binds to phosphatidylserine-enriched cell surfaces in a receptor-independent manner. Milk Fat Globule 1 plays an important role in the maintenance of intestinal epithelial homeostasis and the promotion of mucosal healing. It promotes VEGF-dependent neovascularization.

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 Microplate (12 x 8 well strips)

Properties

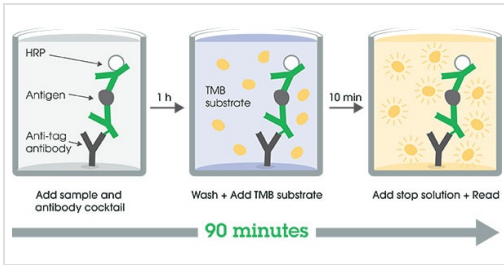
Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Milk Fat Globule 1 Capture Antibody	1 x 600µl
10X Mouse Milk Fat Globule 1 Detector Antibody	1 x 600µl

Components	1 x 96 tests
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 CPI - HAMA Blocker (ab193969)	1 x 6ml
Mouse Milk Fat Globule 1 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BP	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

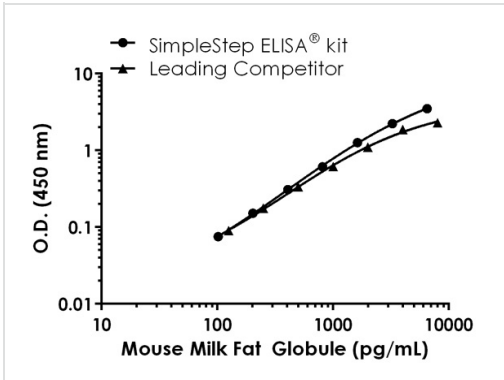
Function	Plays an important role in the maintenance of intestinal epithelial homeostasis and the promotion of mucosal healing. Promotes VEGF-dependent neovascularization (By similarity). Contributes to phagocytic removal of apoptotic cells in many tissues. Specific ligand for the alpha-v/beta-3 and alpha-v/beta-5 receptors. Also binds to phosphatidylserine-enriched cell surfaces in a receptor-independent manner. Zona pellucida-binding protein which may play a role in gamete interaction. Binds specifically to rotavirus and inhibits its replication. Medin is the main constituent of aortic medial amyloid.
Tissue specificity	Mammary epithelial cell surfaces and aortic media. Overexpressed in several carcinomas.
Sequence similarities	Contains 1 EGF-like domain. Contains 2 F5/8 type C domains.
Post-translational modifications	Medin has a ragged N-terminus with minor species starting at Pro-264 and Gly-273.
Cellular localization	Membrane. Secreted.

Images



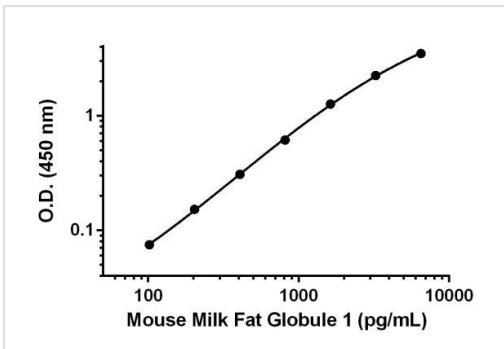
Other - Mouse Milk Fat Globule 1 ELISA Kit
(ab208981)

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.



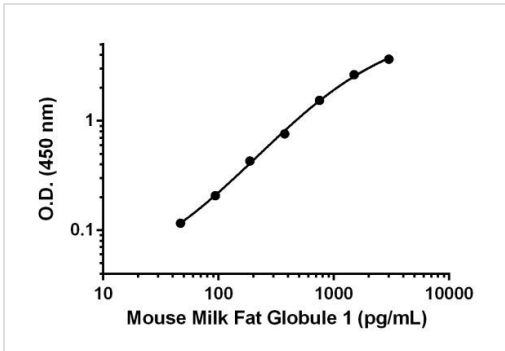
Mouse Milk Fat Globule 1 standard curve comparison data.

Standard curve comparison between mouse Milk Fat Globule 1 SimpleStep ELISA[®] kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 5-fold increase in sensitivity.



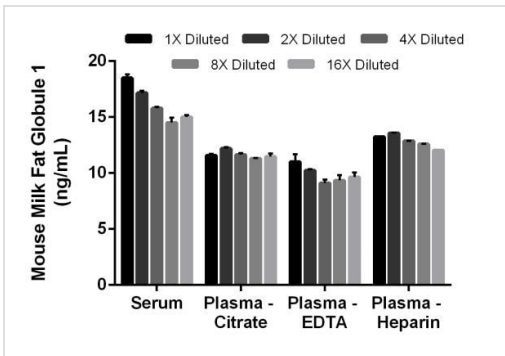
Example of mouse Milk Fat Globule 1 standard curve in Sample Diluent 12BP.

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



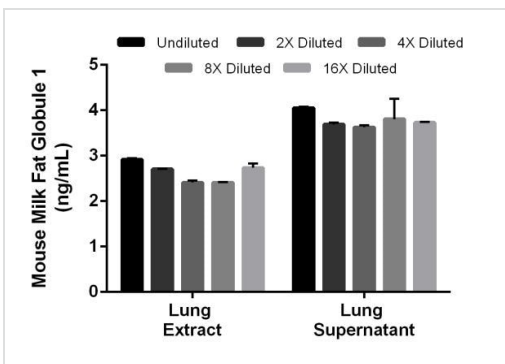
Example of mouse Milk Fat Globule 1 standard curve in 1X Cell Extraction Buffer PTR.

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



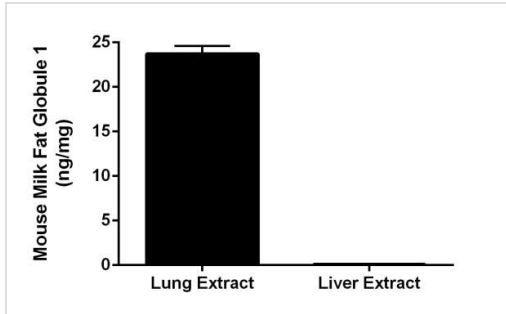
Interpolated concentrations of native Milk Fat Globule 1 in mouse serum and plasma samples.

The concentrations of Milk Fat Globule 1 were measured in duplicates, interpolated from the Milk Fat Globule 1 standard curves and corrected for sample dilution. 1X diluted samples are as follows: serum 15%, plasma (citrate) 20%, plasma (EDTA) 20% and plasma (heparin) 15%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Milk Fat Globule 1 concentration was determined to be 16.2 ng/mL in serum, 11.6 ng/mL in plasma (citrate), 9.9 ng/mL in plasma (EDTA), 12.9 ng/mL in plasma (heparin).



Interpolated concentrations of native Milk Fat Globule 1 in mouse lung tissue extract sample based on a 125 µg/mL extract load and lung tissue culture (day 5) supernatant samples (40%).





The concentrations of Milk Fat Globule 1 were measured in duplicate and interpolated from the Milk Fat Globule 1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Milk Fat Globule 1 concentration was determined to be 2.64 ng/mL in mouse lung tissue extract sample and 3.8 ng/mL in lung supernatant samples.



Interpolated concentrations of native Milk Fat Globule 1 in mouse lung and liver extract samples.

The concentrations of Milk Fat Globule 1 were measured in two different dilutions in duplicate and interpolated from the Milk Fat Globule 1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted in ng of Milk Fat Globule 1 per mg of extract (mean +/- SD, n=3).

Powered by recombinant antibodies

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Sandwich ELISA - Mouse Milk Fat Globule 1 ELISA Kit (ab208981)

To learn more about the advantages of recombinant antibodies see [here](#).

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