

Product datasheet

Human Omentin ELISA Kit (ITLN1) ab269545

Recombinant SimpleStep ELISA®

[1 References](#) [6 Images](#)Overview**Product name** Human Omentin ELISA Kit (ITLN1)**Detection method** Colorimetric**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			3.8%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	4			7.1%

Sample type Serum**Assay type** Sandwich (quantitative)**Sensitivity** 0.21 ng/ml**Range** 0.3 ng/ml - 20 ng/ml**Recovery**

Sample specific recovery

Sample type	Average %	Range
Serum	99	80% - 109%

Assay time 1h 30m**Assay duration** One step assay**Species reactivity** Reacts with: Human**Product overview**

Human Omentin ELISA Kit (ITLN1) (ab269545) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Omentin (ITLN1) protein in serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Omentin (ITLN1) with 0.21 ng/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

Omentin, also known as intelectin-1 (ITLN) and intestinal lactoferrin receptor, is an intelectin encoded by the *ITLN1* gene. Intelectins are carbohydrate-binding proteins that bind microbe-specific carbohydrate residues in a calcium-dependent manner. Omentin is expressed containing an 18- amino acid signal peptide, a C-terminal 15- amino acid pro-peptide sequence and a 280-amino acid mature chain. Omentin recognizes terminal acyclic 1,2-diol moieties, which includes lactoferrin and D-galactofuranose. Omentin does not bind to human glycans and can bind to certain gram-positive and gram-negative bacteria. Omentin has been found to be highly expressed in omental adipose tissue and in the small intestine.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

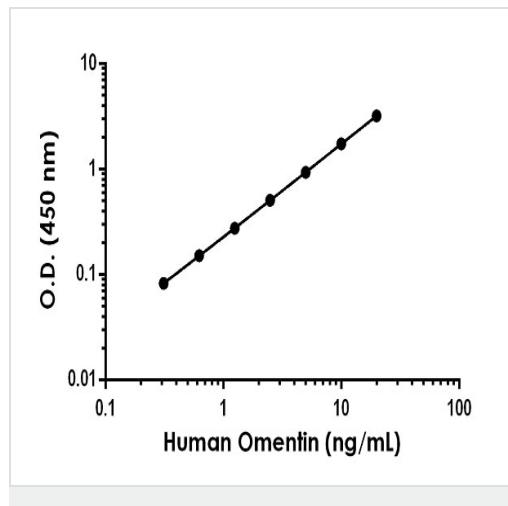
Storage instructions

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

Components	1 x 96 tests
10X Human Omentin (ITLN1) Capture Antibody	1 x 600µl
10X Human Omentin (ITLN1) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
Antibody Diluent 5BI	1 x 6ml
Human Omentin (ITLN1) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

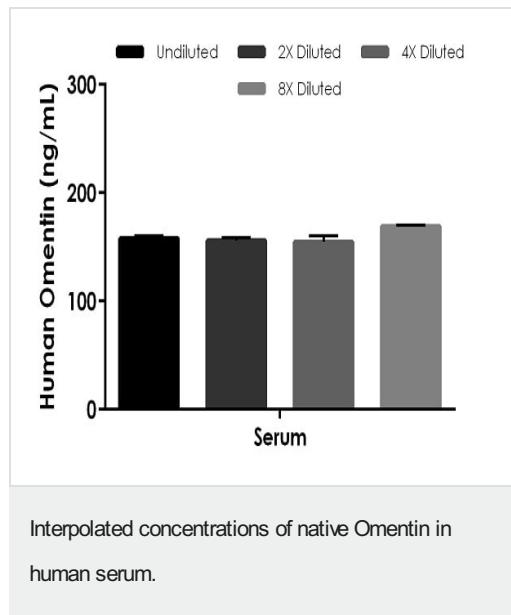
Function	Has no effect on basal glucose uptake but enhances insulin-stimulated glucose uptake in adipocytes. Increases AKT phosphorylation in the absence and presence of insulin. May play a role in the defense system against microorganisms. May specifically recognize carbohydrate chains of pathogens and bacterial components containing galactofuranosyl residues, in a calcium-dependent manner. May be involved in iron metabolism.
Tissue specificity	Highly expressed in omental adipose tissue where it is found in stromal vascular cells but not in fat cells but is barely detectable in subcutaneous adipose tissue (at protein level). Highly expressed in the small intestine. Also found in the heart, testis, colon, salivary gland, skeletal muscle, pancreas and thyroid and, to a lesser degree, in the uterus, spleen, prostate, lymph node and thymus.
Sequence similarities	Contains 1 fibrinogen C-terminal domain.
Developmental stage	Found in fetal small intestine and thymus.
Post-translational modifications	N-glycosylated.
Cellular localization	Cell membrane. Secreted. Enriched in lipid rafts.

Images

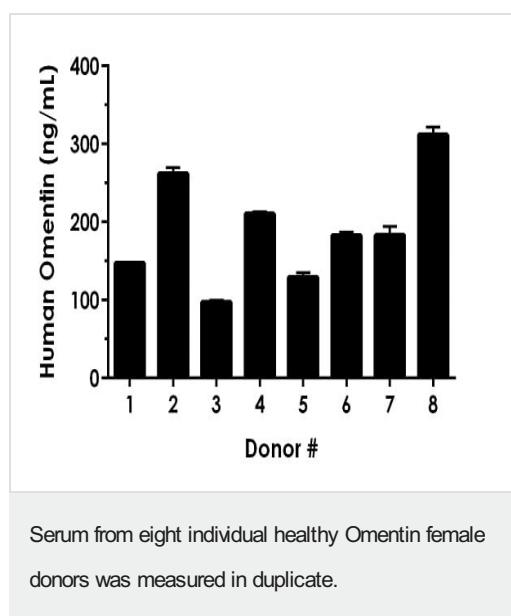


The Omentin standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

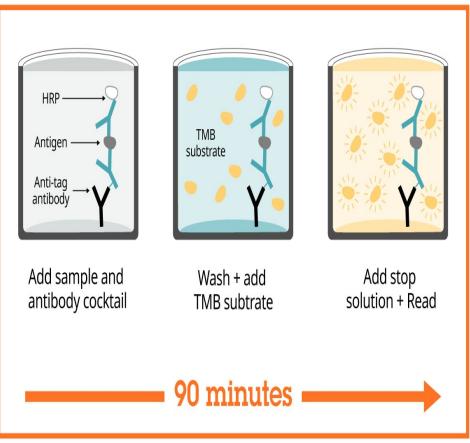
Example of human Omentin standard curve in
Sample Diluent NS with 1X Cell Extraction
Enhancer.



The concentrations of Omentin were measured in duplicates, interpolated from the target standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean target concentration was determined to be 159.4 ng/mL in serum.



Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Omentin concentration was determined to be 190.6 ng/mL with a range of 97.4 – 311.8 ng/mL.



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 - Human Omentin ELISA Kit
(ITLN1) (ab269545)



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

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Get more done with SimpleStep ELISA



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

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

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