

Human Leptin ELISA Kit ab179884

SimpleStep ELISA

8 References [画像数 7](#)

製品の概要

製品名 Human Leptin ELISA Kit

検出方法 Colorimetric

再現性 Intra-Assay (同時再現性)

サンプル	N	平均値	SD	CV%
Serum	8			5.1%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Serum	3			3.5%

サンプルの種類 Cell culture supernatant, Serum, Plasma, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 4.65 pg/ml

検出範囲 15.63 pg/ml - 1000 pg/ml

添加回収試験 特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Serum	91	90% - 93%
Cell culture media	102	101% - 104%
Hep Plasma	98	88% - 105%
EDTA Plasma	82	80% - 87%
Cit plasma	113	107% - 123%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性

交差種: Human

製品の概要

As of January 16, 2020, Human Leptin ELISA kit (ab179884) has been re-developed. We have identified new recombinant monoclonal antibodies to provide improved performance and consistency.

Human Leptin ELISA kit (ab179884) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Leptin protein in human serum, plasma and cell culture supernatants. It uses our proprietary SimpleStep ELISA® technology. Quantitate human Leptin with 4.65 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.

特記事項

Leptin is a secreted protein factor produced by adipocytes. It regulates energy balance and body fat deposits. Leptin deficiency in humans and mice can cause in obesity. Acute low levels of leptin triggers increased appetite and chronic leptin deficiency can block the onset of puberty.

試験プラットフォーム

Microplate

製品の特性**保存方法**

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

内容	1 x 96 tests	10 x 96 tests
10X Human Leptin Capture Antibody	1 x 600µl	1 x 600µl
10X Human Leptin Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent 4BI	1 x 6ml	1 x 6ml
Human Leptin Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml

内容	1 x 96 tests	10 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

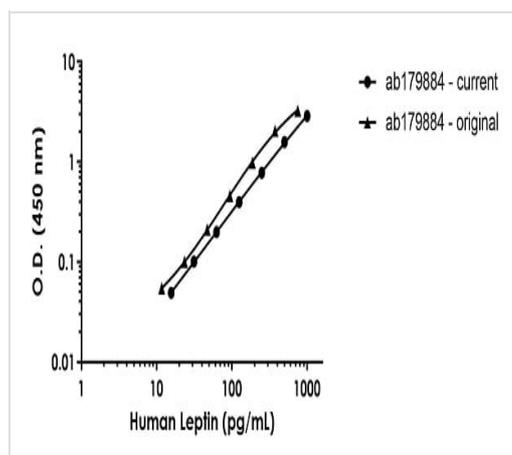
機能 May function as part of a signaling pathway that acts to regulate the size of the body fat depot. An increase in the level of LEP may act directly or indirectly on the CNS to inhibit food intake and/or regulate energy expenditure as part of a homeostatic mechanism to maintain constancy of the adipose mass.

関連疾患 Defects in LEP may be a cause of obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat.

配列類似性 Belongs to the leptin family.

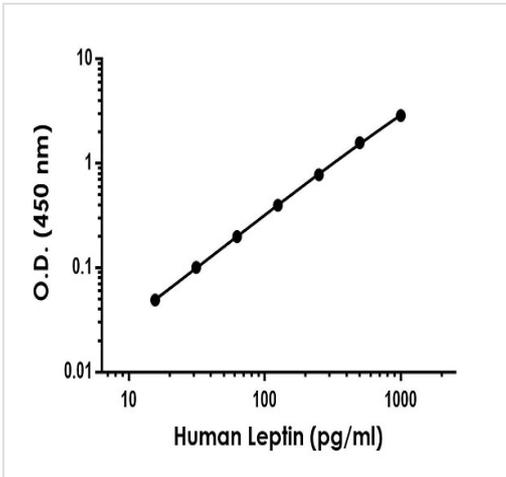
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画像



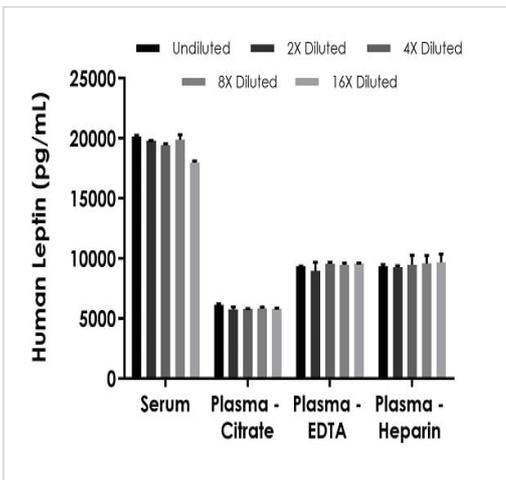
Standard Curve comparison between original human Leptin SimpleStep ELISA kit and redeveloped Simplestep ELISA kit. SimpleStep ELISA kit shows increased performance.

Human Leptin redevelopment standard curve comparison



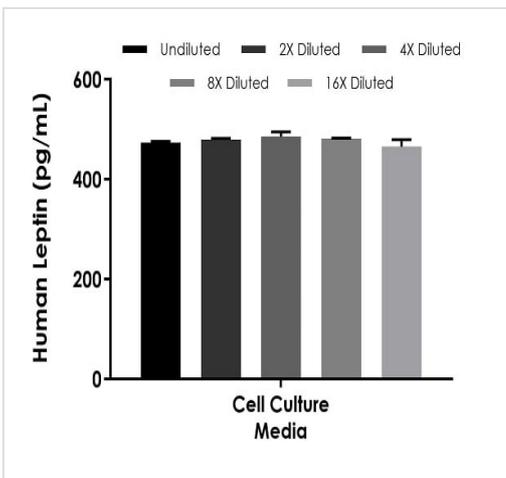
Example of human Leptin standard curve in Sample Diluent NS.

The Leptin 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.



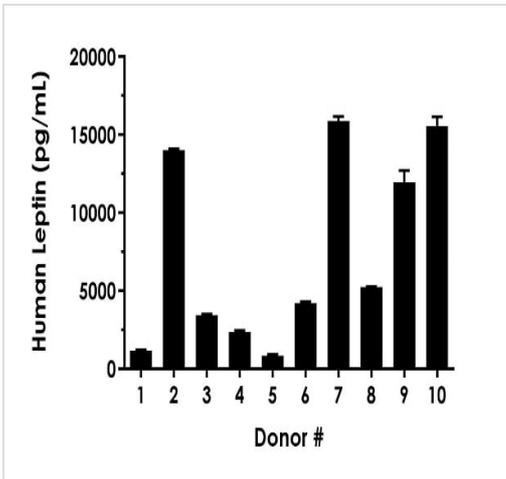
Interpolated concentrations of native Leptin in human serum and plasma.

The concentrations of Leptin were measured in duplicates, interpolated from the Leptin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 2.5%, plasma (citrate) 10%, plasma (edta) 10%, and plasma (heparin) 10%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Leptin concentration was determined to be 19,448 pg/mL in serum, 5,865 pg/mL in plasma (citrate), 9,377 pg/mL in plasma (edta), and 9,463 pg/mL in plasma (heparin).



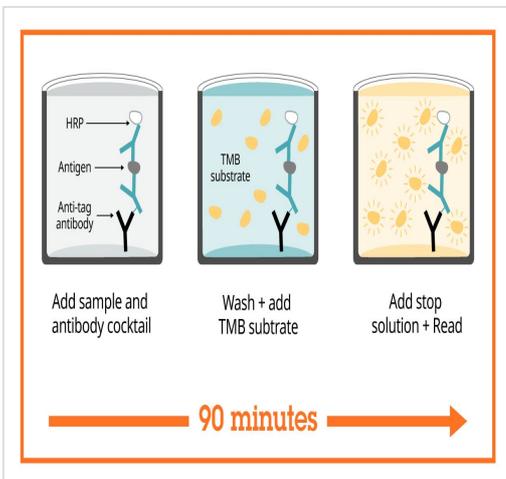
Interpolated concentrations of spike Leptin in cell culture media samples.

The concentrations of Leptin were measured in duplicates, interpolated from the Leptin standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Leptin concentration was determined to be 7,463 pg/mL with a range of 836 – 15,878 pg/mL.

Serum from ten individual healthy human male donors was measured in duplicate.



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 Leptin ELISA Kit (ab179884)

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](#).

Sandwich ELISA - Human Leptin ELISA Kit (ab179884)

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