**Product name**
Human Leptin ELISA Kit

**Detection method**
Colorimetric

**Sample type**
Cell culture supernatant, Serum, Plasma

**Assay type**
Sandwich (quantitative)

**Sensitivity**
< 2 pg/ml

**Range**
1.64 pg/ml - 400 pg/ml

**Recovery**
94%

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**Sample specific recovery**

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell culture supernatant</td>
<td>95.42</td>
<td>84% - 104%</td>
</tr>
<tr>
<td>Serum</td>
<td>94.49</td>
<td>83% - 103%</td>
</tr>
<tr>
<td>Plasma</td>
<td>93.85</td>
<td>82% - 102%</td>
</tr>
</tbody>
</table>

**Assay duration**
Multiple steps standard assay

**Species reactivity**

*Reacts with:* Human

**Product overview**

Abcam’s Leptin Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human Leptin in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human Leptin coated on a 96-well plate. Standards and samples are pipetted into the wells and Leptin present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human Leptin antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of Leptin bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Get results in 90 minutes with Human Leptin ELISA Kit (ab179884) from our SimpleStep ELISA® range.
Notes
Optimization may be required with urine samples.

Tested applications
Suitable for: Sandwich ELISA

Platform
Microplate

Properties

Storage instructions
Store at -20°C. Please refer to protocols.

Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>160X HRP-Streptavidin Concentrate</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>5X Assay Diluent B</td>
<td>1 x 15ml</td>
</tr>
<tr>
<td>Assay Diluent A</td>
<td>1 x 30ml</td>
</tr>
<tr>
<td>Biotinylated anti-Human Leptin (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Leptin Microplate (12 strips x 8 wells)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Recombinant Human Leptin Standard (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>TMB One-Step Substrate Reagent</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

Function
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.

Involvement in disease
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.

Sequence similarities
Belongs to the leptin family.

Cellular localization
Secreted.

Applications

Our Abpromise guarantee covers the use of ab100581 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>
Leptin measured in cell lysates showing quantity (pg) per mg of protein

Leptin measured in biological fluids showing quantity (pg) per mL of tested sample

Representative Standard Curve using ab100581.
Representative Standard Curve using ab100581.

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- We investigate all quality concerns to ensure our products perform to the highest standards

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