

## Datasheet: PHP198

<b>Description:</b>	RECOMBINANT HUMAN LEPTIN
<b>Name:</b>	LEPTIN
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	1 mg

## Product Details

**Applications** This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.abdserotec.com/protocols](http://www.abdserotec.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA	■			0.2 - 0.4ng/well
Western Blotting	■			1.5 - 3.0ng/lane
Functional Assays	■			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified recombinant protein - lyophilised
<b>Reconstitution</b>	Reconstitute with 1.0 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. AbD Serotec recommend that the vial is gently mixed after reconstitution. For extended storage, the addition of 0.1% bovine serum albumin (BSA) is recommended.
<b>Preparation</b>	Purified recombinant leptin expressed in <i>E.coli</i> . Sterile filtered through a 0.2 micron filter.
<b>Buffer Solution</b>	Lyophilized with 0.1% TFA
<b>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	<1EU/ug
<b>Approx. Protein Concentrations</b>	1.0 mg/ml after reconstitution
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P41159</a> LEP_HUMAN <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3952</a> LEP <a href="#">Related reagents</a></p>
<b>Synonyms</b>	OB, OBS
<b>Product Information</b>	Leptin is a major adipose-derived hormone and member of the leptin family, which plays a key role in appetite control and the regulation of energy expenditure.

Secreted leptin associates with proteins within the bloodstream and is transported to the brain, where it inhibits or up-regulates the activity of neuropeptides such as neuropeptide Y (NPY) and alpha-melanocyte-stimulating hormone respectively. Leptin is a recognised marker of obesity, with a correlation between circulating levels of leptin and body fat mass, and defects in leptin production result in severe obesity. Regulators of leptin expression include insulin, cortisol, cAMP and thiazolidinediones.

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<b>Molecular Weight</b>	16.0kD (147 amino acid residues).
<b>Activity</b>	PHP198 is biologically active in the <i>ob/ob</i> mouse obesity model. The <i>ob/ob</i> mice were treated via intraperitoneal injection once daily at a dose of 5 µg Leptin/gm of body weight for 7 days. Significant effects on body weight, food consumption, and plasma glucose levels were observed to saline-treated controls.
<b>Purity</b>	>98% by SDS PAGE and HPLC analysis.
<b>ELISA</b>	Recombinant human leptin may be use as a standard for ELISA applications with either a <a href="#">purified human leptin antibody</a> (AHP1616) or a <a href="#">biotinylated human leptin antibody</a> (AHP1616B)
<b>Western Blotting</b>	Recombinant human leptin may be used as the positive control for Western Blotting applications with either a <a href="#">purified human leptin antibody</a> (AHP1616) or a <a href="#">biotinylated human leptin antibody</a> (AHP1616B)
<b>Storage</b>	Prior to reconstitution store at +4°C. After reconstitution store at -20°C. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Shelf Life</b>	3 months from date of reconstitution.
<b>Health And Safety Information</b>	Material Safety Datasheet Documentation #10527 available at: <a href="http://www.abdserotec.com/uploads/MSDS/10527.pdf">http://www.abdserotec.com/uploads/MSDS/10527.pdf</a>
<b>Regulatory</b>	For research purposes only

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**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [sales.us@abdserotec.com](mailto:sales.us@abdserotec.com)

**Worldwide**

Tel: +44 1865 852 700  
Fax: +44 1865 852 739  
Email: [sales@abdserotec.com](mailto:sales@abdserotec.com)

**Europe**

Tel: 00800 2255 4223  
Fax: 00800 2329 2223  
Email: [sales.eu@abdserotec.com](mailto:sales.eu@abdserotec.com)

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