

## Datasheet: PHP198

**BATCH NUMBER 153074**

<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.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.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 - lyophilized
<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. Bio-Rad 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>Carrier Free</b>	Yes

<b>Endotoxin Level</b>	< 1.0 EU/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>    <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>	<p><b>Recombinant human leptin</b> is a leptin preparation made in <i>E. coli</i>. 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.</p> <p>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.</p>
<b>Protein Molecular Weight</b>	16.0 kDa (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
<b>ELISA</b>	Recombinant human leptin may be use as a standard for ELISA applications with <a href="#">purified human leptin antibody</a> (AHP1616).
<b>Western Blotting</b>	Recombinant human leptin may be used as the positive control for Western Blotting applications with a <a href="#">purified human leptin antibody</a> (AHP1616).
<b>Storage</b>	<p>Prior to reconstitution store at -20°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.</p>
<b>Guarantee</b>	Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Health And Safety Information**      Material Safety Datasheet documentation #10527 available at:  
<https://www.bio-rad-antibodies.com/SDS/PHP198>  
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**Regulatory**                      For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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