

## 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.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 - 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. 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>Endotoxin Level</b>	<1EU/ug
<b>Approx. Protein Concentrations</b>	1.0 mg/ml after reconstitution
<b>External Database Links</b>	<b>UniProt:</b> <a href="https://www.uniprot.org/uniprot/P41159">P41159</a> <a href="#">Related reagents</a>

**Entrez Gene:**[3952](#) LEP [Related reagents](#)

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**Synonyms** OB, OBS

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**Product Information** **Recombinant human leptin** E. coli. 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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**Molecular Weight** 16.0kD (147 amino acid residues).

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**Activity** PHP198 is biologically active in the *ob/ob* mouse obesity model. The *ob/ob* 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.

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**Purity** >98% by SDS PAGE and HPLC analysis.

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**ELISA** Recombinant human leptin may be use as a standard for ELISA applications with [purified human leptin antibody](#) (AHP1616).

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**Western Blotting** Recombinant human leptin may be used as the positive control for Western Blotting applications with a [purified human leptin antibody](#) (AHP1616).

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**Storage** 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.

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**Shelf Life** 3 months from date of reconstitution.

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**Health And Safety Information** Material Safety Datasheet documentation #10527 available at: 10527: <https://www.bio-rad-antibodies.com/uploads/MSDS/10527.pdf>

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**Regulatory** For research purposes only

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