

## Datasheet: PHP198

**BATCH NUMBER 162476**

|                      |                          |
|----------------------|--------------------------|
| <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).

|                   | <b>Yes</b> | <b>No</b> | <b>Not Determined</b> | <b>Suggested Dilution</b> |
|-------------------|------------|-----------|-----------------------|---------------------------|
| 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><br/> <a href="#">P41159</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <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.<br/> After reconstitution store at -20°C.<br/> 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>  
10527

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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)  
'M362368:200501'

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