

## Datasheet: PRP33

<b>Description:</b>	RECOMBINANT RAT 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
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>	Rat
<b>Product Form</b>	Purified recombinant protein - lyophilised
<b>Reconstitution</b>	Reconstitute with 1ml 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.
<b>Preparation</b>	Purified recombinant leptin expressed in <i>E. coli</i>
<b>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	<1EU/ug
<b>Approx. Protein Concentrations</b>	1.0mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P50596</a> LEP_RAT <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">25608</a> Lep <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Ob
<b>Product Information</b>	<p>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, and signals through binding to the obesity receptor (OB-R) in the hypothalamus.</p> <p>Leptin is a recognised marker of obesity and human studies have shown 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>Molecular Weight</b>	16.2kD (147 amino acid residues)
<b>Activity</b>	Determined by an <i>in vivo</i> assay using the ob/ob mouse obesity model and NZO. Both strains of mice were treated via intraperitoneal injection once daily at a dose of 5µg 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>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 #10268 available at: <a href="http://www.abdserotec.com/uploads/MSDS/10268.pdf">http://www.abdserotec.com/uploads/MSDS/10268.pdf</a>
<b>Regulatory</b>	For research purposes only

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