

## Lep Recombinant Rat Leptin

<b>Catalog No.</b>	CRL302A CRL302B CRL302C	<b>Quantity:</b>	200 µg 1.0 mg 5 mg
<b>Alternate Names:</b>	OB Protein, Obesity Protein, OBS, Obesity factor.		
<b>Description:</b>	Leptin is a protein that is thought to have a critical role in the physiologic regulation of body weight via its capacity to inhibit food intake and stimulate energy expenditure. Leptin also has thermogenic actions and regulates enzymes of fatty acid oxidation. Severe hereditary obesity in rodents and humans can be caused by defects in leptin production. These functions include the regulation of hematopoiesis, angiogenesis, wound healing, inflammation, and immune responses. Recombinant rat Leptin is a non-glycosylated protein, containing 147 amino acids.		
<b>Physical Appearance:</b>	Sterile filtered white lyophilized (freeze-dried) powder		
<b>Gene ID:</b>	25608		
<b>Protein Accession No:</b>	P50596		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	16.2 kDa		
<b>Formulation:</b>	Recombinant rat Leptin is lyophilized from a concentrated (1mg/mL) solution with 0.1% TFA.		
<b>Purity:</b>	Typically greater than 95.0% as determined by: Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm		
<b>Endotoxin Level:</b>	Measured by kinetic LAL analysis and is typically $\leq 1$ EU/µg protein.		
<b>Biological Activity:</b>	The activity is determined by the leptin-dependent stimulation of mouse BaF3 indicator cells and is typically 0.06 – 0.35 ng/mL.		
<b>Amino Acid Sequence:</b>	MVPIHKVQDD TKTLIKTIVT RINDISHTQS VSARQRTVGL DFIPGLHPIL SLSKMDQTLA VYQQILTSLP SQNVLQIAHD LENLRDLLHL LAFSKSCSLP QTRGLQKPES LDGVLEASLY STEVVALSRL QGSLQDILQQ LDLSPEC		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.		
<b>Storage &amp; Stability:</b>	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage. <b>Avoid repeated freeze-thaw cycles. Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed.</b>		

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