

Lep

Recombinant Mouse Leptin, Animal Free

Catalog No.	CRL301A-AF	Quantity:	200 µg
	CRL301B-AF		1.0 mg
	CRL301C-AF		5 mg

Alternate Names: OB protein, Obesity protein, OBS, Obesity factor

Description: Leptin 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 mouse Leptin is a non-glycosylated protein, containing 147 amino acids.

Made without animal-derived components in an animal-free facility.

UniProt ID: P41160

Gene ID: 16846

Source: *E. coli*

Molecular Weight: 16.1 kDa (147 aa) monomer

Formulation: Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5

Purity: ≥ 95.0% by Reducing and Non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg by kinetic LAL analysis

Biological Activity: This product demonstrates dose-dependent cell proliferation using Ba/F3 cells.

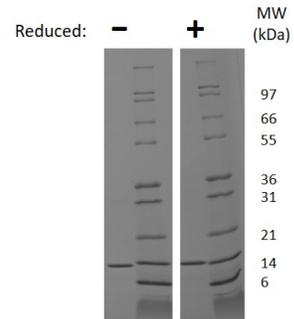
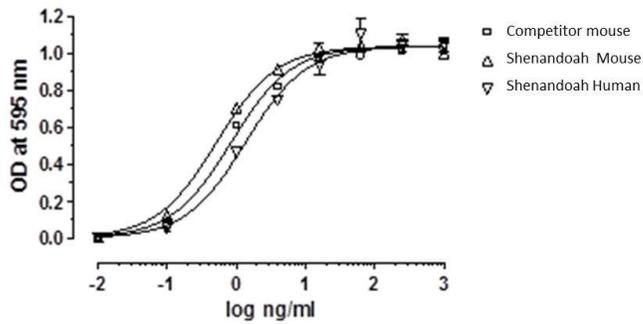
Amino Acid Sequence: MVPIQKVQDD TKTLIKTIVT RINDISHTQS VSAKQRVTGL DFIPGLHPIL SLSKMDQTLA VYQQVLTSLP SQNVLQIAND LENLRDLLHL LAFSKSCSLP QTSGLQKPES LDGVLEASLY STEVVALSRL QGSLQDILQQ LDVSPEC

Reconstitution: **Centrifuge vial prior to opening.** 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 **20 mM HCl** at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.



Mouse Leptin Induced Proliferation of Baf/3 Cells



Mouse Leptin Gel

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Mouse Leptin has a predicted MW of 16.1 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

