

GFR14 Recombinant Rat Leptin

Description

Leptin is a hormone that is produced by adipose tissue and plays critical roles in the physiologic regulation of body weight. Leptin acts through the leptin receptor (LEPR) to regulate adipose mass by inhibiting hunger and balancing energy usage. Leptin mutations cause severe hereditary obesity and hypogonadism in rodents and humans. Leptin also has thermogenic actions, regulates enzymes of fatty acid oxidation, and is involved in hematopoiesis, angiogenesis, wound healing, inflammation, and immune responses.

Length	147 aa
Molecular Weight	16.3 kDa
Source	E. coli
Accession Number	P50596
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

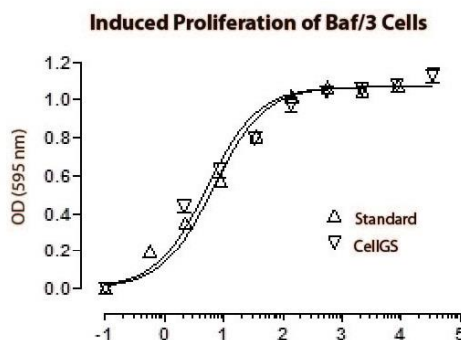
Specifications

Alternative Names	Obesity protein, OBS
Biological Activity	Rat Leptin is fully biologically active when compared to standard. The activity is determined by the ability to induce Baf/3 cells proliferation.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MVPIHKVQDD TKTLIKTIIVT RINDISHTQS VSARQRVTGL DFIPGLHPIL SLSKMDQTLA VYQQILTSLP SQNVLQIAHD LENLRDLLHL LAFSKSCSLP QTRGLQKPES LDGVLEASLY STEVVALSRL QGSLQDILQQ LDLSPEC

Preparation and Storage

Reconstitution	Centrifuge vial before 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 water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of Baf/3 cells by Rat Leptin. Cell proliferation was measured to calculate the ED50.