

## GFH37

## Recombinant Human 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.

<b>Length</b>	147 aa
<b>Molecular Weight</b>	16.2 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P50596
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

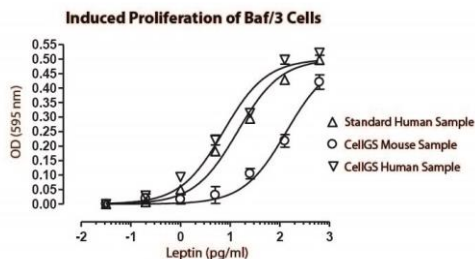
### Specifications

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

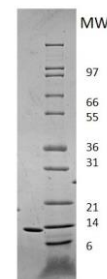
### Preparation and Storage

<b>Reconstitution</b>	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.
<b>Stability and Storage</b>	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 for Leptin. Cell proliferation was measured to calculate the ED50.



Non-reducing (-) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue, 1 μg of protein was loaded. Human Leptin has a predicted Mw of 16.2 kDa.