

## Product datasheet for **TP720054XL**

### Leptin (LEP) (NM\_000230) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human leptin (LEP)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Val22-Cys167
Tag:	Tag Free
Predicted MW:	16 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Reconstitution Method:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH <sub>2</sub> O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage:	Store at -80°C.
Stability:	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
RefSeq:	<a href="#">NP_000221</a>
Locus ID:	3952
UniProt ID:	<a href="#">P41159</a> , <a href="#">A4D0Y8</a>
Cytogenetics:	7q32.1
Synonyms:	LEPD; OB; OBS



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**Summary:**

This gene encodes a protein that is secreted by white adipocytes into the circulation and plays a major role in the regulation of energy homeostasis. Circulating leptin binds to the leptin receptor in the brain, which activates downstream signaling pathways that inhibit feeding and promote energy expenditure. This protein also has several endocrine functions, and is involved in the regulation of immune and inflammatory responses, hematopoiesis, angiogenesis, reproduction, bone formation and wound healing. Mutations in this gene and its regulatory regions cause severe obesity and morbid obesity with hypogonadism in human patients. A mutation in this gene has also been linked to type 2 diabetes mellitus development. [provided by RefSeq, Aug 2017]

**Protein Families:**

Druggable Genome, Secreted Protein

**Protein Pathways:**

Adipocytokine signaling pathway, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction

**Product images:**