

## Product datasheet for **AR50000PU-N**

### Leptin Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Leptin human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MVPIQKVQDD TKTLIKTIVT RINDISHTQS VSSKQKVTGL DFIPGLHPIL TLSKMDQTLA VYQQILTSMP SRNVIQISND LENLRDLLHV LAFSKSCHLP WASGLETLDLDS LGGVLEASGY STEVALSRL QGSLQDMLWQ LDLSPGC
Predicted MW:	16 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified Buffer System: Form : Liquid. In Phosphate buffered saline, pH 7.4.
Protein Description:	Recombinant human leptin was overexpressed as insoluble protein aggregate in E.coli and purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
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:**