



# LKT Laboratories, Inc.

## Leptin (22-56), human

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

**Product ID** L1660  
**CAS No.**  
**Chemical Name**  
  
**Synonym** OBGRP(22-56), human

Val-Pro-Ile-Gln-Lys-Val-Gln-Asp-Asp-Thr-Lys-Thr-Leu-Ile-Lys-Thr-Ile-Val-Thr-Arg-Ile-Asn-Asp-Ile-Ser-His-Thr-Gln-Ser-Val-Ser-Ser-Lys-Gln-Lys

**Formula** C<sub>171</sub>H<sub>298</sub>N<sub>50</sub>O<sub>56</sub>  
**Formula Wt.** 3950.56  
**Melting Point**  
**Purity** ≥98%  
**Solubility** Insoluble in water. Soluble in 60% acetonitrile containing 0.1% TFA.

Product ID	Size
L1660	1 mg

**Store Temp** -20° C  
**Ship Temp** Ambient

**Description** Leptin is an endogenous peptide that binds leptin receptors; it is involved in feeding behavior and energy homeostasis. Leptin exhibits anorexigenic, antihypertensive, and neuroprotective activities. Leptin induces secretion of  $\alpha$ -melanocyte-stimulating hormone ( $\alpha$ -MSH) and gonadotropin-releasing hormone (GnRH). In obese and hypertensive rats, leptin decreases blood pressure. This peptide also inhibits myocardial muscle contractility and modulates bone growth and resorption. Additionally, leptin may be involved in the development of atherosclerosis. In animal models of Alzheimer's disease, leptin decreases levels of tau and amyloid-B (AB), improving cognitive performance.

- References** Comninos AN, Jayasena CN, Dhillo WS. The relationship between gut and adipose hormones, and reproduction. *Hum Reprod Update*. 2014 Mar-Apr;20(2):153-74. PMID: 24173881.
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- Zhang W, Telemaque S, Augustyniak RA, et al. Adenovirus-mediated leptin expression normalises hypertension associated with diet-induced obesity. *J Neuroendocrinol*. 2010 Mar;22(3):175-80. PMID: 20059648.
- Taleb S, Herbin O, Ait-Oufella H, et al. Defective leptin/leptin receptor signaling improves regulatory T cell immune response and protects mice from atherosclerosis. *Arterioscler Thromb Vasc Biol*. 2007 Dec;27(12):2691-8. PMID: 17690315.
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- Moynihan AT, Hehir MP, Glavey SV, et al. Inhibitory effect of leptin on human uterine contractility in vitro. *Am J Obstet Gynecol*. 2006 Aug;195(2):504-9. PMID: 16647683.
- Mantzoros CS. The role of leptin in human obesity and disease: a review of current evidence. *Ann Intern Med*. 1999 Apr 20;130(8):671-80. PMID: 10215564.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.