

Product Information

Leptin, human recombinant, expressed in *E. Coli*

Catalog Number **L4146**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

Synonym: OB

Product Description

Leptin is a 16 kDa, 146 amino acid non-glycosylated peptide. It was originally hypothesized to be some sort of "satiety factor", and although the relationship appears to be much more complex than that term would suggest, it has been shown to be intimately involved in the regulation of energy homeostasis,^{1,2} as well as the in the neuroendocrine and reproductive systems.² The amino acid sequence of leptin is highly conserved among vertebrates.¹

Leptin is expressed primarily in adipose tissue and until recently was believed to be produced solely by adipocytes. However, recent studies have shown that leptin is produced by other cell types, including placental trophoblasts and amnion cells, and is believed to play a role in normal pregnancy development.³

This product is lyophilized from a 0.2 μm -filtered solution of 10 mM Tris-HCl with 150 mM NaCl, pH 8.5, with no carrier protein.

Purity: >97% (SDS-PAGE)

The biological activity of Leptin is measured by its ability to induce proliferation of leptin-dependent rat OB-R transfected murine BAF3 cells.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial by adding 20 mM Tris-HCl, pH 8.0, to make a 1 mg/mL working solution.

Storage/Stability

The product can be stored at $-20\text{ }^{\circ}\text{C}$ for longer than 6 months.

After reconstitution, store at $2-8\text{ }^{\circ}\text{C}$ for 1 month. For extended storage, freeze in working aliquots at $-70\text{ }^{\circ}\text{C}$ or $-20\text{ }^{\circ}\text{C}$. Repeated freezing and thawing is not recommended.

References

1. Anderson, L.B., Ann. Med., **28**, 5-7 (1996).
2. Matsushima, K. et al., J. Exp. Med., **169**, 1485 (1989).
3. Masuzaki, H. et al., Nature Medicine, **3**, 1029 (1997).

FF,KMR,MAM 10/11-1