

Leptin, human recombinant (rHuLeptin)

Catalog No: 53290 Lot No: XXXXX Source: *E. coli*

Synonyms: OB Protein, Obesity Protein, OBS, Obesity factor

Background

A 16-kDa peptide hormone secreted from white adipocytes and implicated in the regulation of food intake and energy balance. Leptin provides the key afferent signal from fat cells in the feedback system that controls body fat stores.

Description

Leptin human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 146 amino acids and having a molecular mass of 16 kDa. Leptin is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1 mg/ml) solution with 0.0045 mM NaHCO₃.

Solubility

The lyophilized leptin is very soluble in water and most aqueous buffers below and above the isoelectric point.

Stability

Lyophilized leptin, although stable at room temperature, should be stored desiccated below 0°C. Reconstituted leptin is best stored refrigerated at 4°C.

Purity

Greater than 95.0% as determined by (a) Analysis by SEC-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Pro-Ile-Gln.

Activity

Biological Activity is proven by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor.

Usage

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