



Leptin, porcine recombinant (rpLeptin)

Catalog No: 95035
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 porcine recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 146 amino acids and additional Ala at N-terminus, 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 0.02% NaHCO₃.

Solubility

It is recommended to reconstitute the lyophilized leptin in sterile 0.4% NaHCO₃ adjusted, not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized leptin, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution leptin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 98.0% as determined by (a) Gel filtration analysis, (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-Trp.

Activity

Biological active as evidenced by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor.

Usage

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