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# **Product Datasheet**

Product Name Recombinant Rat Leptin

Cata No CB500129

Source Escherichia Coli.

**Synonyms** OB Protein, Obesity Protein, OBS, Obesity factor.

# **Description**

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.

Leptin Rat Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 147 amino acids and having a molecular mass of 16 kDa.

The Leptin is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

### **Biological Activity**

Biological activity of Leptin Rat is evidenced by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor.

#### **Purity**

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

#### **Formulation**

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

#### Reconstition

It is recommended to reconstitute the lyophilized Leptin in sterile  $18M\Omega$ -cm H2O not less than  $100\mu g/ml$ , 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.

### Sequence

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