Recombinant Ovine Leptin, MTS-tagged

Cat. No. LEP-22O **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Ovine Leptin MTS tagged produced in*E.Coli*is a single, non-glycosylated, polypeptide chain containing 157 amino acids and having a molecular mass of 17.5 kDa. The Leptin is purified by proprietary chromatographic techniques. The membrane translocating sequence Tag is composed of 10 amino acids Val-Leu-Leu-Pro-Val-Leu-Leu-Ala-Ala-Pro located at the N-terminus.
Species	Ovine
Source	E.coli
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.
Amino Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Pro-Ile-Arg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 98.0% 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 0.02% $NaHCO_3$.

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Solubility	It is recommended to reconstitute the lyophilized Leptin in sterile 0.02% $NaHCO_3$not less than 100 g/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	Biological active as evidenced by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor.
Protein Content	Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.2 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using calibrated solution of Leptin Ovine as a Reference Standard.
Storage	Lyophilized Leptin Ovine MTS tagged although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution Leptin should be stored at 4℃between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	LEP leptin [Ovis aries]
Synonyms	LEP; leptin; ob; leptin (obesity homolog, mouse)
Gene ID	443534
UniProt ID	Q28603

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