

## Recombinant Ovine Leptin, MTS-tagged

Cat. No. LEP-220 Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Ovine Leptin MTS tagged produced in <i>E. Coli</i> 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.
<b>Species</b>	Ovine
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Amino Acid Sequence</b>	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Pro-Ile-Arg.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
<b>Formulation</b>	The protein was lyophilized from a concentrated (1mg/ml) solution with 0.02% NaHCO <sub>3</sub> .

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<b>Solubility</b>	It is recommended to reconstitute the lyophilized Leptin in sterile 0.02% NaHCO <sub>3</sub> not less than 100 g/ml, which can then be further diluted to other aqueous solutions.
<b>Biological Activity</b>	Biological active as evidenced by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor.
<b>Protein Content</b>	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.
<b>Storage</b>	Lyophilized Leptin Ovine MTS tagged 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.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">LEP leptin [ Ovis aries ]</a>
<b>Synonyms</b>	LEP; leptin; ob; leptin (obesity homolog, mouse)
<b>Gene ID</b>	<a href="#">443534</a>
<b>UniProt ID</b>	<a href="#">Q28603</a>

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