

Mouse Leptin Recombinant Protein



RPPB0707

Product Information Protein Information

Product SKU:

RPPB0707

Accession:

P41160

Host:

Escherichia Coli.

Protein description:

Leptin Mono-Pegylated Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 146 amino acids and an additional Ala at N-terminus. Pegylated Mouse Leptin contains PEG 20 kDa at its N-terminus and having a molecular mass of 35.6 kDa as determined by mass spectrometry. Since its enlarged hydrodynamic volume Pegylated Leptin runs on SDS-PAGE as a 48 kDa protein and in gel-filtration on Superdex 200 as over 100 kDa protein. Pegylated Mouse Leptin half-life in circulation after SC injection was over 20 hours. Mouse Leptin was purified by proprietary chromatographic techniques according to Salomon et al (2006) Protein Expression and Purification 47, 128–136 and then pegylated.

Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Synonyms:

OB Protein, Obesity Protein, OBS, Obesity factor.

Formulation:

The mouse Leptin was lyophilized from a concentrated (0.65mg/ml) solution containing 0.003mM NaHCO₃.

Purity:

Greater than 99.0% as determined by:(a) Analysis by Gel-Filtration.(b) Analysis by SDS-PAGE.

Solubility:

It is recommended to reconstitute the lyophilized Leptin in sterile 0.4% NaHCO₃ adjusted to pH-8.5 not less than 100µg/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.

Biological Activity:

Pegylated mouse Leptin is capable of stimulating proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor. Pegylated mouse Leptin in vitro activity is only slightly lower than the non-pegylated antagonist but in vivo it has profound weight reducing effect (as compared to the non-pegylated leptin), resulting mainly from reduced food intake.