

32-1554: mLeptin PEG Recombinant Protein

Alternative Name : OB Protein, Obesity Protein, OBS, Obesity factor.

Description

Source : Escherichia Coli. 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. 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.

Product Info

Amount :	20 µg
Purification :	Greater than 99.0% as determined by:(a) Analysis by Gel-Filtration.(b) Analysis by SDS-PAGE.
Content :	The mouse Leptin was lyophilized from a concentrated (0.65mg/ml) solution containing 0.003mM NaHCO ₃ .
Storage condition :	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.

Application Note

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. 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.

