Rat Leptin Recombinant Protein

RPPB0709

Product Information

Product SKU:
RPPB0709

Accession:
P50596

Host:
Escherichia Coli.

Protein Information

Protein description:
Mono-Pegylated Leptin Rat Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 147 amino acids and an additional Ala at N-terminus having a molecular mass of 35.6 kDa (with 20 kDa PEG) as determined by mass spectometry. However due to enlarged hydrodymanic volume it runs on the SDS-PAGE as 48 kDa protein and in gel-filtration on Superdex 200 as over 100 kDa protein. Its half-life in circulation after SC injection was over 20 hours. Rat 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 protein was lyophilized from a concentrated (0.65mg/ml) solution with 0.003mM $NaHCO_3$.

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 pegylated Rat Leptin in sterile 0.4% $NaHCO_3$ adjusted to pH-8.5, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:
Lyophilized Rat Leptin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Rat 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 Rat Leptin is capable of stimulatng proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor. Its 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.