

Ovine Leptin tA Recombinant Protein



RPPB0730

Product Information Protein Information

Product SKU:

RPPB0730

Host:

Escherichia coli.

Protein description:

Pegylated Leptin Antagonist Triple Mutant Ovine Recombinant is a single non-glycosylated polypeptide chain containing 146 aa and an additional Ala at N-terminus and having a molecular mass of ~ 35.6 kDa, Leptin was mutated, resulting in L39A/D40A/F41A mutant. However due to enlarged hydrodynamic volume it runs on the SDS-Page as 48 kDa protein and in gel-filtration on Superdex 200 as over 200kDa protein. Leptin Antagonist Triple Mutant Ovine Recombinant Mono-Pegylated with 20kDa PEG and was purified by proprietary chromatographic techniques.

Appearance:

White lyophilized (freeze-dried) powder.

Formulation:

The protein was lyophilized from a concentrated (0.65mg/ml) solution with 0.003mM NaHCO₃.

Purity:

Greater than 95.0% as determined by: (a) Gel filtration analysis. (b) Analysis by SDS-PAGE.

Solubility:

It is recommended to reconstitute the lyophilized Leptin-Antagonist Triple Mutant Ovine Recombinant in sterile water or sterile 0.4% NaHCO₃ adjusted to pH 8, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized Leptin Antagonist Triple Mutant Ovine Recombinant although stable at room temperature for several weeks, should be stored desiccated below -18° C. Upon reconstitution at > 0.1 Lep-tA mutant mg/ml and up to 2mM and filter sterilization Leptin mutant can be stored at 4° C or even room temperature for several weeks making it suitable for long term infusion studies using osmotic pumps. At lower concentration addition of a carrier protein (0.1% HSA or BSA) is suggested. Please prevent freeze-thaw cycles.

Biological Activity:

Pegylated triple antagonist is capable of inhibiting leptin-induced proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor. Its in vitro activity is 6-8 fold lower than the non-pegylated antagonist but in vivo it has profound weight gain effect (as compared to the non-pegylated antagonist like in mouse leptin antagonists), resulting mainly from increased food intake.