

Rat Leptin tA Recombinant Protein



RPPB0728

Product Information Protein Information

Product SKU:

RPPB0728

Host:

Escherichia coli.

Protein description:

Leptin Antagonist Triple Mutant Rat Recombinant is a single non-glycosylated polypeptide chain containing 146 amino acids and additional Ala at N-terminus. The Rat Leptin antagonist was mutated, resulting in L39A/D40A/F41A mutant. The Rat Leptin antagonist is bound to 20 kDa mono-PEG at N-terminus, resulting in 35.6 kDa. The Rat Leptin triple antagonist runs as a 48 kDa. Leptin Antagonist Triple Mutant Rat Recombinant was purified by proprietary chromatographic techniques.

Appearance:

White lyophilized (freeze-dried) powder.

Formulation:

The Rat Leptin triple antagonist was lyophilized from a concentrated (0.65mg/ml) solution with 0.003mM NaHCO₃.

Purity:

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

Solubility:

It is recommended to reconstitute the lyophilized Leptin Antagonist Triple Mutant Rat Recombinant in sterile water or sterile 0.4% NaHCO₃ adjusted to pH 8-9, not less than 100µg/ml, which can then be further diluted with other aqueous solutions.

Stability:

Lyophilized Leptin Antagonist Triple Mutant Rat Recombinant although stable at room temperature for several weeks, should be stored desiccated below -18°C. Upon reconstitution at > 0.1 mg/ml and up to 2 mM and filter sterilization LEP 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:

Leptin Antagonist Triple Mutant Rat Recombinant half-life in circulation after SC injection was over 20 hours. Leptin Antagonist Triple Mutant Rat Recombinant is capable of inhibiting leptin-induced proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor. Leptin Antagonist Triple Mutant Rat Recombinant in vitro activity is 5-6 fold lower than the non-pegylated antagonist, though in vivo it has profound weight gain effect (as compared to the non-pegylated antagonist), resulting mainly from increased food intake.