

RPPB0723

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## Product Information    Protein Information

**Product SKU:**

RPPB0723

**Host:**

Escherichia coli.

**Protein description:**

Pegylated Leptin Antagonist Triple Mutant Human Recombinant is a single non-glycosylated polypeptide chain containing 146 amino and additional Ala at N-terminus acids and having a molecular weight of 35.6kDa, Leptin was mutated, resulting in L39A/D40A/F41A. 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 200 kDa protein. Leptin Antagonist Triple Mutant Human Recombinant is 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 NaHCO<sub>3</sub>.

**Purity:**

Greater than 98.0% as determined by: (a) Gel filtration analysis. (b) Analysis by SDS-PAGE.

**Solubility:**

It is recommended to reconstitute the lyophilized Leptin Antagonist Triple Mutant pegylated Human Recombinant in sterile 0.4% NaHCO<sub>3</sub> adjusted to pH 8-9, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:**

Lyophilized PEG-SHLA although stable at room temperature for several weeks, should be stored desiccated below - 20C. Upon reconstitution at > 0.1 mg/ml and up to 2 mg/ml of PEG-SHLA and filter sterilization mLEP mutant can be stored at 4C 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:**

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), resulting mainly from increased food intake. Its in vivo activity compared to that of PEG-MLA is 9-27 fold higher.