

Leptin Antagonist Triple Mutant, PEGylated, ovine recombinant (roLeptin-tm-PEG)

Catalog No: 97319 Lot No: XXXXX Source: *E. coli*

Synonyms:

Description

PEGylated leptin antagonist triple mutant ovine recombinant is a single non-glycosilated polypeptide chain containing 146 amino acids and additional Ala at N-terminus and having a molecular mass of approx. 35. 6 kDa. Leptin was mutated, resulting in L39A/D40A/F41A mutant. However due to enlarged hydrodymanic volume it runs on the SGS-Page as 48 kDa protein and in gel-filtration on Superdex 200 as over 200 kDa protein. Leptin antagonist triple mutant ovine recombinant mono-PEGylated with 20 kDa PEG and was purified by proprietary chromatographic techniques.

Physical Appearance

White lyophilized (freeze-dried) powder.

Formulation

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

Solubility

It is recommended to reconstitute the lyophilized leptin antagonist triple mutant in sterile water or sterile 0.4% NaHCO₃ adjusted to pH 8, not less than $100 \mu g/ml$, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized leptin antagonist triple mutant, although stable at room temperature for several weeks, should be stored desiccated below -18?C. Upon reconstitution at > 0.1 mg/ml Lep-tA mutant and up to 2 mM 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.

Purity

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

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.

Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.