

Active Recombinant Ovine Leptin Antagonist Triple Mutant, PEG-tagged

Cat. No. LEP-264O **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Pegylated Leptin Antagonist Triple Mutant Ovine Recombinant is a single non-glycosylated polypeptide chain containing 146 amino and additional Ala at N-terminus acids 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.

Species

Ovine

Source

Ovine

Form

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.

Bio-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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Physical Appearance	White lyophilized (freeze-dried) powder.
Solubility	It is recommended to reconstitute the lyophilized Leptin-Antagonist Triple Mutant Ovine Recombinant in sterile water or sterile 0.4% NaHCO ₃ adjusted to pH 8, not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Protein content	Protein quantitation was carried out by UV spectroscopy at 280 nm using the absorbency value of 0.2 as the extinction coefficient for a 0.1% (1mg/ml) solution at pH 8.0. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
Storage	Lyophilized Leptin Antagonist Triple Mutant Ovine Recombinant although stable at room temperature for several weeks, should be stored C. Upon reconstitution at μ desiccated below -18 > 0.1 Lep-tA mutant mg/ml and C or even μ up to 2mM and filter sterilization Leptin mutant can be stored at 4 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.

GENE INFORMATION

Gene Name	LEP leptin [<i>Ovis aries</i>]
Official Symbol	LEP
Synonyms	LEP; leptin; ob; leptin (obesity homolog, mouse)
Gene ID	443534
UniProt ID	Q28603

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