Lep
Recombinant Rat Leptin Antagonist Triple Mutant PEG

Catalog No.	CS425A	**Quantity:**	5 µg
	CS425B		20 µg
	CS425C		1.0 mg

Alternate Names: OB

Description: Recombinant Rat Leptin Antagonist Triple Mutant is a single non-glycosylated polypeptide chain containing 146 aa with an additional Ala at the N-terminus and having a molecular mass of ~16 kDa. The mutant was produced by substitutions at L39A, D40A, and F41A.

To produce the pegylated protein, the mutant was bound to 20 kDa mono-PEG at the N-terminus, resulting in a 35.6 kDa protein. The Mutant PEG runs as a 48 kDa protein and was purified by proprietary chromatographic techniques.

Gene ID: 25608

Source: *E. coli*

Formulation: Lyophilized from a concentrated (0.65 mg/ml) solution containing 0.003 mM $NaHCO_3$.

Purity: >99.0% as determined by Gel filtration and SDS-PAGE analyses.

Protein Content: Protein quantification was carried out by UV spectroscopy at 280 nm using the absorbency value of 0.2 as the extinction coefficient for a 0.1% (1 mg/ml) solution at pH 8.0. This value was calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).

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

Reconstitution: Reconstitute the lyophilized protein in sterile water or sterile 0.4% $NaHCO_3$ adjusted to pH 8-9, not less than 100 µg/ml, which can then be further diluted with other aqueous solutions.

Storage & Stability: Lyophilized protein, although stable at room temperature for several weeks, should be stored desiccated at -20°C to -80°C. Upon reconstitution at >0.1 mg/ml, dilution up to 2 mM, and filter sterilization, the protein can be stored at 2-4°C 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.**

Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com