



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## Recombinant Leptin Antagonist Triple Mutant (Leptin tA)

**Catalog No.**  
IP-01-354P

**Source**  
Escherichia Coli

### **Description**

Leptin Antagonist Triple Mutant Mouse Recombinant is a single non-glycosylated polypeptide chain containing 146 amino and additional Ala at N-terminus acids and having a molecular mass of ~ 16 kDa, LEP was mutated, resulting in L39A/D40A/F41A mutant. Leptin Antagonist Triple Mutant Mouse

### **Physical 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>.

### **Solubility:**

It is recommended to reconstitute the lyophilized Leptin Antagonist Triple Mutant Mouse Recombinant in sterile water or sterile 0.4% NaHCO<sub>3</sub> 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 Mouse Recombinant although stable at room temperature for several weeks, should be stored desiccated below -18°C. Upon reconstitution at > 0.1 Leptin mutant 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.**

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### ***Purity***

Greater than 99.0% as determined by:

- (a) Gel filtration analysis.
- (b) Analysis by SDS-PAGE.

### ***Amino acid sequence***

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Val-Pro-Ile-Gln

### ***Biological Activity***

ProSpec's Leptin Antagonist Triple Mutant Mouse Recombinant is capable of inhibiting Leptin-induced proliferation of BAF/3 cells stably transfected with the long form of human Leptin receptor. It also inhibits various Leptin effects in several in vitro bioassays.

### ***Protein content***

Protein quantization was carried out by UV spectroscopy at 280 nm using the absorbency value of 0.21 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).

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