

# **Pufferfish Leptin**

Synonyms: OB Protein, Obesity Protein, OBS, Obesity factor.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
20 μg	1654.900.020		
100 μg	1654.900.100		
1 mg	1654.900.199		

Please enquire for bulk quantities and other vial sizes

#### **Description**

Leptin Pufferfish (Takifugu rubripes) Recombinant produced in *E.Coli* is a single, non-glycosylated, polypeptide chain having a molecular mass of 16 kDa. Bioactive Leptin Pufferfish (Takifugu rubripes) Recombinant was prepared according to the sequence published by Kurokawa et al. (2005)Peptides 26, 745-750 in two forms: monomer and covalent dimer. MS analysis revealed molecular masses of 15,291 and 30,585 Da, close to the theoretical values of 15,270 and 30,540 Da. CD spectra revealed high similarity to mammalian leptins. Other details of its preparation will be soon published by Yacobovitz et al (in press), General and Comparative Endocrinology.

• Source E. Coli

• **Purity** ≥ 99 % (SDS-PAGE, SEC-HPLC)

• Endotoxin level  $\leq 0.1 \text{ng/µg} (\leq 1 \text{EU/µg})$ 

• **Buffer** The Pufferfish Leptin was lyophilized from a concentrated (0.85mg/ml) solution

with 0.003mM NaHCO3\*

Physical state
Sterile filtered, lyophilized

## **Biological Activity**

Biological active as evidenced by inducing proliferation of BAF/3 cells stably transfected with the long form of human leptin receptor. The affinity of human leptin receptors is considerably lower campared to mammalian leptins.

#### Reconstitution

It is recommended to reconstitute the lyophilized Pufferfish Leptin in sterile 0.4% NaHCO<sub>3</sub> pH-9 not less than  $100\mu g/ml$ , which can then be further diluted to other aqueous solutions.

# **Stability**

Lyophilized Pufferfish Leptin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Leptin should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please avoid repeated freeze-thaw cycles**.

### **Amino Acid Sequence**

ALPGALDAMD VEKMKSKVTW KAQGLVARID KHFPDRGLRF DTDKVE GST SVVASLESYN NLISDRFGGV SQIKTEISSL AGYLNHWREG NCQE QQPKV WPRRNIFNHT VSLEALMRVR EFLKLLQKNV DLLERC

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

<sup>\*</sup>The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.