

## 32-7056: Recombinant Human Leptin

**Gene :** LEP  
**Gene ID :** 3952  
**Uniprot ID :** P41159

### Description

Source: E.coli.  
MW :16.1kD.

Recombinant Human Leptin is produced by our E.coli expression system and the target gene encoding Val22-Cys167 is expressed. Leptin is a hormone secreted from white adipocytes and plays important role in the regulation of food intake and energy balance. Leptin functions via signaling pathways involving OB-R in hypothalamus. Animal models have revealed the influence of Leptin in reducing body weight and regulating blood glucose level. When mutations are introduced in obese gene, mice with impaired function of leptin are massively obese and in high risk of diabetes. Leptin deficiency reduces metabolic rate. Leptin deficient mice are less active and with lower body temperature than normal animals. Human Leptin shares approximately 84% sequence identity with the mouse protein. Human Leptin consists of 167 amino acid residue including a 21 amino acid residue signal sequence and 146 amino acid residue mature protein sequence.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** VPIQKVQDDTKTIKTIIVTRINDISHTQSVSSKQKVTGLDFIPGLHPILTLSKMDQTLAVYQQILTSMPSRNVIQISN  
DLENLRDLLHVLAFSKSCHLPWASGLETLDLGGVLEASGYSTEVVALSRLQGSLQDMLWQLDLSPGC

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.