

# Recombinant mouse Leptin/OB protein

Catalog Number: LEP0701

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

22-167aa

### UniProt No.

P41160

### NCBI Accession No.

NP\_032519

### Alternative Names

LEP, OB, OBS, Leptin Mouse, Obesity factor, Obese protein, Leptin,

## PRODUCT SPECIFICATION

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### Molecular Weight

16 kDa (147aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4)

### Purity

> 95% by SDS-PAGE

### Tag

Non-Tagged

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

Leptin is a 16-kDa nonglycosylated hormone that is produced in mature adipocytes. Leptin acts primarily in the hypothalamus to reduce food intake and body weight. In ob/ob mice, the gene encoding leptin is mutated, resulting in morbid obesity and associated abnormalities, including hyperphagia, hypothermia, diabetes and infertility. Originally discovered in the mouse, the cDNA for leptin has been so far cloned from a variety of species including human, rat, cow, chicken, pig, sheep and dog. Recombinant mouse leptin was overexpressed as insoluble protein aggregate in E. coli and purified by FPLC gel-filtration chromatography, after refolding of the

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isolated inclusion bodies in a renaturation buffer

### Amino acid Sequence

MVPIQKVQDD TKTLIKTIVT RINDISHTQS VSAKQRVTGL DFIPGLHPIL SLSKMDQTLA VYQQVLTSLP SQNVLQIAND  
LENLRDLLHL LAFSKSCSLP QTSGLQKPES LDGVLEASLY STEVVALSRL QGSLQDILQQ LDVSPEC

### General References

Jeong KJ., et al. (1999) Appl Environ Microbiol. 65(7), 3027-32.

Anini Y., et al. (2003) Diabetes. 52(2), 252-259.

Hyogo H., et al. (2002) J. Biol. Chem. 277(37), 34117-34124.

## DATA

### SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

