

Recombinant human Leptin/OB protein

Catalog Number: LEP3002

PRODUCT INFORMATION

Expression system

E.coli

Domain

22-167aa

UniProt No.

P41159

NCBI Accession No.

NP_000221

Alternative Names

LEP, OB, OBS, Leptin, Obesity factor, Obese protein, Leptin, Leptin Murine Obesity Homolog, Leptin Precursor Obesity Factor, Obesity, Obesity homolog mouse, Obesity Murine Homolog Leptin,

PRODUCT SPECIFICATION

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

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

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

Description

Human 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

Recombinant human Leptin/OB protein

Catalog Number: LEP3002

infertility. The function of leptin in regulating appetite and metabolism, as well as the possibility of using leptin as a therapeutic agent, are currently under intense investigation. Recombinant human leptin was overexpressed as insoluble protein aggregate in *E. coli* and purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

MVPIQKVQDD TKTLIKTIVT RINDISHTQS VSSKQKVTGL DFIPGLHPIL TLSKMDQTLA VYQQILTSMP SRNVIQISND
LENLRDLLHV LAFSKSCHLP WASGLETLDL LGGVLEASGY STEVVALSRL QGSLQDMLWQ LDLSPGC

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.

