

## **Product datasheet for PH309259**

## OriGene Technologies, Inc.

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## Leptin (LEP) (NM\_000230) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** LEP MS Standard C13 and N15-labeled recombinant protein (NP\_000221)

Species:HumanExpression Host:HEK293

**Expression cDNA Clone** 

RC209259

or AA Sequence:

Predicted MW:

18.6 kDa

Protein Sequence: >RC209259 protein sequence

Red=Cloning site Green=Tags(s)

MHWGTLCGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGLDFIPGLHPIL TLSKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDSLGGVLEASGY

STEVVALSRLQGSLQDMLWQLDLSPGC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

**Storage:** Store at -80°C. Avoid repeated freeze-thaw cycles.

**Stability:** Stable for 3 months from receipt of products under proper storage and handling conditions.

**RefSeq:** NP 000221

RefSeq Size: 3444

RefSeq ORF: 501

Synonyms: LEPD; OB; OBS

**Locus ID:** 3952

**UniProt ID:** <u>P41159</u>, <u>A4D0Y8</u>





Cytogenetics: 7q32.1

**Summary:** This gene encodes a protein that is secreted by white adipocytes into the circulation and

plays a major role in the regulation of energy homeostasis. Circulating leptin binds to the leptin receptor in the brain, which activates downstream signaling pathways that inhibit feeding and promote energy expenditure. This protein also has several endocrine functions, and is involved in the regulation of immune and inflammatory responses, hematopoiesis, angiogenesis, reproduction, bone formation and wound healing. Mutations in this gene and its regulatory regions cause severe obesity and morbid obesity with hypogonadism in human

patients. A mutation in this gene has also been linked to type 2 diabetes mellitus

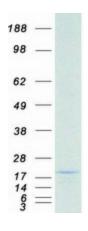
development. [provided by RefSeq, Aug 2017]

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Adipocytokine signaling pathway, Cytokine-cytokine receptor interaction, Jak-STAT signaling

pathway, Neuroactive ligand-receptor interaction

## **Product images:**



Coomassie blue staining of purified LEP protein (Cat# [TP309259]). The protein was produced from HEK293T cells transfected with LEP cDNA clone (Cat# [RC209259]) using MegaTran 2.0 (Cat# [TT210002]).