

Product datasheet for RC209259L1

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Leptin (LEP) (NM_000230) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Leptin (LEP) (NM 000230) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Leptin

Synonyms: LEPD; OB; OBS

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

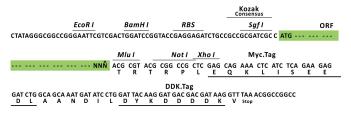
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC209259).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_000230

ORF Size: 501 bp



Leptin (LEP) (NM_000230) Human Tagged Lenti ORF Clone - RC209259L1

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000230.1</u>

RefSeq Size: 3444 bp

RefSeq ORF: 504 bp

Locus ID: 3952

UniProt ID: P41159

Cytogenetics: 7q32.1

Domains:

Protein Families: Druggable Genome, Secreted Protein

Leptin

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

pathway, Neuroactive ligand-receptor interaction

MW: 18.6 kDa

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

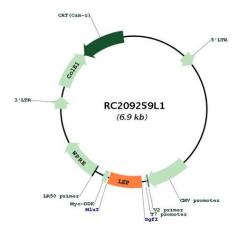
plays a major role in the regulation of energy homeostasis. Circulating leptin binds to the leptin receptor in the brain, which activates downstream signaling pathways that inhibit feeding and promote energy expenditure. This protein also has several endocrine functions, and is involved in the regulation 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

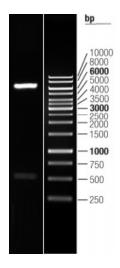
development. [provided by RefSeq, Aug 2017]



Product images:



Circular map for RC209259L1



Double digestion of RC209259L1 using Sgfl and Mlul $\,$