

Product datasheet for MR226855L4

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Lepr (NM_146146) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Lepr (NM_146146) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Lepr

Synonyms: db; diabetes; Leprb; LEPROT; Modb1; OB-RGRP; obese-like; obl; Obr

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR226855).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_146146

ORF Size: 3486 bp





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 146146.2</u>

 RefSeq Size:
 4126 bp

 RefSeq ORF:
 3489 bp

 Locus ID:
 16847

 UniProt ID:
 P48356

Cytogenetics: 4 46.96 cM

Gene Summary: Receptor for hormone LEP/leptin (Probable) (PubMed:11861497). On ligand binding, mediates

LEP central and peripheral effects through the activation of different signaling pathways such

as JAK2/STAT3 and MAPK cascade/FOS (PubMed:10799542, PubMed:25383904,

PubMed:11923481, PubMed:11861497). In the hypothalamus, LEP acts as an appetite-regulating factor that induces a decrease in food intake and an increase in energy

consumption by inducing anorexinogenic factors and suppressing orexigenic neuropeptides,

also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones (PubMed:10660043, PubMed:12594516). In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic and affects innate and adaptive immunity (PubMed:25383904, PubMed:11923481). Control of energy homeostasis and melanocortin production (stimulation of POMC and full repression of AgRP transcription) is mediated by STAT3 signaling, whereas

distinct signals regulate NPY and the control of fertility, growth and glucose homeostasis

(PubMed:12594516). Involved in the regulation of counter-regulatory response to

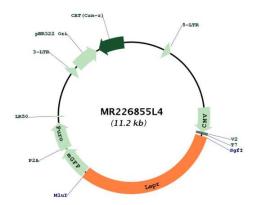
hypoglycemia by inhibiting neurons of the parabrachial nucleus (PubMed:25383904). Has a specific effect on T lymphocyte responses, differentially regulating the proliferation of naive

and memory T-cells. Leptin increases Th1 and suppresses Th2 cytokine production

(PubMed:9732873).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR226855L4