

Product datasheet for **RC218456**

Leptin Receptor (LEPR) (NM_001003680) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Leptin Receptor (LEPR) (NM_001003680) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Leptin Receptor
Synonyms:	CD295; LEP-R; LEPRD; OB-R; OBR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC218456 representing NM_001003680
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGCATCGCC**

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Protein Sequence: >RC218456 representing NM_001003680
 Red=Cloning site Green=Tags(s)

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QGKHKCGRPQGPLHRKTRDLC SLVYLLTLPPLLSYDPAKSPSVRNTQE
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8001_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



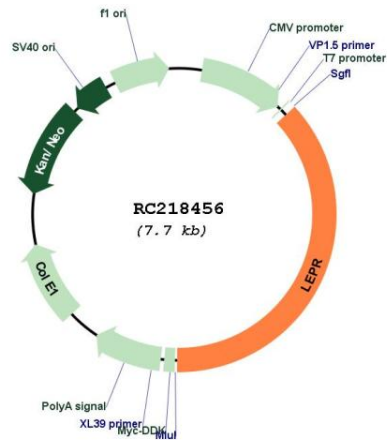
* The last codon before the Stop codon of the ORF

ACCN: NM_001003680

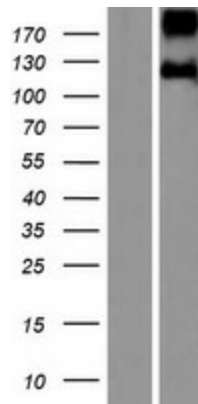
ORF Size: 2874 bp

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:	<ol style="list-style-type: none"> 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:	NM_001003680.3 , NP_001003680.1
RefSeq Size:	3096 bp
RefSeq ORF:	2877 bp
Locus ID:	3953
UniProt ID:	P48357
Cytogenetics:	1p31.3
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction
MW:	109.39 kDa
Gene Summary:	The protein encoded by this gene belongs to the gp130 family of cytokine receptors that are known to stimulate gene transcription via activation of cytosolic STAT proteins. This protein is a receptor for leptin (an adipocyte-specific hormone that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this gene have been associated with obesity and pituitary dysfunction. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. It is noteworthy that this gene and LEPROT gene (GeneID:54741) share the same promoter and the first 2 exons, however, encode distinct proteins (PMID:9207021).[provided by RefSeq, Nov 2010]

Product images:



Circular map for RC218456



Western blot validation of overexpression lysate (Cat# [LY424100]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218456 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).