

## Product datasheet for **RG235079**

### Leptin Receptor (LEPR) (NM\_001198687) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Leptin Receptor (LEPR) (NM_001198687) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LEPR
Synonyms:	CD295; LEP-R; LEPRD; OB-R; OBR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG235079 representing NM\_001198687  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGATTTGTCAAAAATTCTGTGGTTTTGTACATTGGGAATTTATTTATGTGATAACTGCGTTTAACT  
 TGCATATCCAATTACTCCTGGAGATTTAAGTTGTCTTGCATGCCACCAAATTCACCTATGACTACTT  
 CCTTTTGCCTGCTGGACTCTCAAAGAATACTTCAAATTCGAATGGACATTATGAGACAGCTGTTGAACCT  
 AAGTTTAAATCAAGTGGTACTCACTTTTCTAACTATCCAAAACAACCTTCCACTGTTGCTTTCCGAGTG  
 AGCAAGATAGAACTGCTCCTTATGTGCAGACAACATTGAAGGAAAGACATTTGTTTCAACAGTAAATTC  
 TTTAGTTTTTCAACAAATAGATGCAAACTGGAACATACAGTGTGGCTAAAAGGAGACTTAAATATTTC  
 ATCTGTTATGTGGAGTCATTATTAAGAATCTATTGAGGAATTAATACTATAAGGTCCATCTTTTATATG  
 TTCTGCCTGAAGTGTAGAAAGTTCACCTCTGGTCCCAAAAAGGCAGTTTTCCAGTGGTTCAGTGC  
 TTGCAGTGTTCATGAATGTTGTGAATGTCTTGTGCCTGTGCCAACAGCCAACTCAACGACTCTCCTT  
 ATGTGTTTGAAAAATCACATCTGGTGGAGTAATTTCCAGTCACTCTAATGTGAGTTCAGCCATAAATA  
 TGGTGAAGCCTGATCCACCATTAGGTTTGCATATGGAATCACAGATGATGGTAATTTAAAGATTTCTTG  
 GTCCAGCCACCATTGGTACCATTTCCACTTCAATATCAAGTGAATATTCAGAGAATTCACAACAGTT  
 ATCAGAGAAGCTGACAAGATTGTCTCAGCTACATCCCTGCTAGTAGACAGTATACTTCTGGGTCTTCGT  
 ATGAGGTTTCAAGTGGAGGCAAGAGACTGGATGGCCAGGAATCTGGAGTACTGGAGTACTCCTCGTGT  
 CTTTACCACACAAGATGCATATACTTTCCACCTAAAATCTGACAAGTGTGGGTCTAATGTTTCTTTT  
 CACTGCATCTATAAGAAGGAAAACAAGATTGTTCCCTCAAAGAGATTGTTTGGTGGATGAATTTAGCTG  
 AGAAAATTCCTCAAAGCCAGTATGATGTTGTGAGTGATCATGTTAGCAAAGTTACTTTTTTCAATCTGAA  
 TGAACCAAACCTCGAGGAAAGTTTACCTATGATGCAGTGTACTGCTGCAATGAACATGAATGCCATCAT  
 CGCTATGCTGAATTATATGTGATTGATGTCAATATCAATATCTCATGTGAAACTGATGGGTACTTAACTA  
 AAATGACTTGCAGATGGTCAACCAGTACAATCCAGTCACTTGGGAAAGCACTTTGCAATTGAGGTATCA  
 TAGGAGCAGCCTTACTGTTCTGATATTCCATCTATTCATCCCATATCTGAGCCAAAGATTGCTATTTG  
 CAGAGTGTGGTTTTATGAATGCATTTCCAGCCAATCTTCTATTATCTGGCTACACAATGTGGATTA  
 GGATCAATCACTCTCTAGGTTCACTTCACTTCCACCAACATGTGTCCTTCTGATTCTGTGGTGAAGCC  
 ACTGCCTCCATCCAGTGTGAAAGCAGAAATTAATAAACATTGGATTATTGAAAATATCTTGGGAAAAG  
 CCAGTCTTCCAGAGAATAACCTTCAATCCAGATTCCGCTATGGTTTAAAGTGGAAAAGAAGTACAATGGA  
 AGATGTATGAGGTTTATGATGCAAAATCAAATCTGTCAGTCTCCAGTTCAGACTTGTGTGCAGTCTA  
 TGCTGTTCAAGTGCCTGTAAGAGGCTAGATGGACTGGGATATTGGAGTAATTGGAGCAATCCAGCCTAC  
 ACAGTTGTGATGGATATAAAAGTTCTATGAGAGGACCTGAATTTTGGAGAATAATTAATGGAGATACTA  
 TGAAAAAGGAGAAAAATGTCACCTTACTTTGGAAGCCCTGATGAAAAATGACTCATTGTGCAGTGTTC  
 GAGATATGTGATAAACCATCATACTTCCGCAATGGAACATGGTCAGAAGATGTGGGAAATCACACGAAA  
 TTCCTTCTGTGGACAGAGCAAGCACATACTGTTACGGTCTGGCCATCAATCAATTGGTGTCTCTG  
 TTGCAATTTTAAATTTAACCTTTTTCATGGCCTATGAGCAAAGTAAATATCGTGCAGTCACTCAGTGCTTA  
 TCCTTTAAACAGCAGTTGTGTGATTGTTTCTGGATACTATCACCAGTATTACAAGCTAATGTATTTT  
 ATTATTGAGTGGAAAAATCTTAATGAAGATGGTGAATAAAATGGCTTAGAATCTTTCATCTGTTAAGA  
 AGTATTATATCCATGATCATTTTATCCCATGAGAAAGTACCAGTTCAGTCTTACCCTAATTTTATGGA  
 AGGAGTGGGAAAACCAAAGATAATTAATAGTTTCACTCAAGATGATATTGAAAAACACCAGAGTGTGCA  
 GGTTTATATGTAATTGTGCCAGTAATTTTCTCTTCCATCTTATTGCTTGGAAACATTATTAATATCAC  
 ACCAAAGAATGAAAAAGCTATTTTGGGAAGATGTTCCGAACCCCAAGAATTGTTCTGGGCACAAGGACT  
 TAATTTTCAAGATGCTTGAAGGCAGCATGTTTCGTTAAGAGTCAACCACTCCCTAATCTCAAGTACC  
 CAGGGACAAAACTGCGGAAGGCCACAGGGTCTCTGCATAGGAAAACCAGAGACCTTTGTTCACTTG  
 TTTATCTGCTGACCTCCCTCCACTATTGCTCTATGACCTGCCAAATCCCCTCTGTGAGAAACACCCA  
 AGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG235079 representing NM\_001198687  
 Red=Cloning site Green=Tags(s)

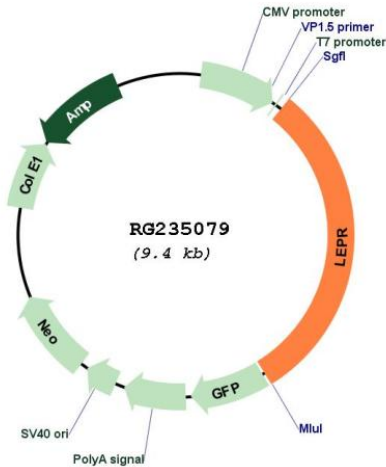
MICQKFCVLLHWEFIYVITAFNLSYPITPWRFKLSCMPPNSTYDYFLLPAGLSKNTSNSNGHYETAVEP  
 KFNSSGTHFSNLKTTFHCCFRSEQDRNCSLCA DNIEGKTFVSTVNSLVFQQIDANWNIQCWLKGD LKLF  
 ICYVESL FKNLFRNYNYKVHLLYVLPVLEDSPLVPQKGSFQMVHCNCSVHECCECLVPVPTAKLNDTLL  
 MCLKITSGGVIFQSP LMSVQPINMVKPDPPLGLHMEITDDGNL KISWSSPPLVPFPLQYQVKYSENSTTV  
 IREADKIVSATSL LVD SILPGSSYEVQVRGKRLDGP GIWSDWSTPRVFTTQDVIYFPKILT SVGSNVSF  
 HCIYKKNKIVPSKEIVWMMNLA EKIPQSQDYDVSDHVS KVTFFNLNETKPRGKFTYDAVYCCNEHECHH  
 RYAELYVIDVNI NISCETDGYLTKMTCRWSTSTIQSLAESTLQLRYHRSSLYCSDIPSIHP ISEPKDCYL  
 QSDGFYECIFQPIFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPSSVKA EITINIGLLKISWEK  
 PVFPENNLQFQIRYGLSGKEVQWKMYEVYDAKSKSVSLPVPDLCAVYAVQVRCKRLDGLGYWSNWSNPAY  
 TVVMDIKVPMRGP EFWRIINGDTMKKEKNVTLWKPLMKNDSLCSVQRYVINHHTSCNGT WSEDVGNHTK  
 FTFWLTEQAHTVTVLAINSIGASVANFNLTFSWPMSKVNIVQSL SAYPLNSSCVIVSWILSPSDYKLMYF  
 IIEWKNLNEDGEIKWLRISSSVKKYYIHDFIPIEKYQFSLYPIFMEGVGKPKIINSFTQDDIEKHQSDA  
 GLYVIVPVIIS SILLGLTLLISHQRMKKLFWEDVPNPKNC SWAQLNFKQMLEGSMFVKSHHSLISST  
 QGHKHCGRPQG PLHRKTRDLC SLVYLLTLPPLLSYDPAKSPSVRNTQE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001198687

**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:**

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\\_001198687.2](#)

**RefSeq Size:** 3044 bp

**RefSeq ORF:** 2877 bp

**Locus ID:** 3953

**UniProt ID:** [P48357](#)

<b>Cytogenetics:</b>	1p31.3
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Adipocytokine signaling pathway, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction
<b>Gene Summary:</b>	<p>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]</p>