

## Product datasheet for **RG223816**

### Leptin Receptor (LEPR) (NM\_002303) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Leptin Receptor (LEPR) (NM_002303) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Leptin Receptor
Synonyms:	CD295; LEP-R; LEPRD; OB-R; OBR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223816 representing NM_002303 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTTGTCAAAAATTCTGTGTGGTTTTGTACATTGGGAATTTATTTATGTGATAACTGCGTTTAACT  
TGTCATATCCAATTACTCCTGGAGATTAAGTTGTCTTGCATGCCACCAAATCAACCTATGACTACT  
CCTTTTGCCTGCTGGACTCTCAAAGAATACTTCAAATTCGAATGGACATTATGAGACAGCTGTTGAACCT  
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AGCAAGATAGAACTGCTCCTTATGTGCAGACAACATTGAAGGAAAGACATTTGTTTCAACAGTAAATTC  
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CAGAGTGATGGTTTTATGAATGCATTTCCAGCCAATCTTCTATTATCTGGCTACACAATGTGGATTA  
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TCACACTTTGTAGAAAATAATATCAACTTAGGAACTTCTAGTAAGAAGACTTTTGCATCTTACATGCCTC  
AATTCAAACTTGTCTACTCAGACTCATAAGATCATGAAAACAAGATGTGTGACCTAACTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223816 representing NM\_002303  
 Red=Cloning site Green=Tags(s)

MICQKFCVLLHWEFIYVITAFNLSYPITPWRFKLSCMPPNSTYDYFLLPAGLSKNTSNSNGHYETAPEV  
 KFNSSGTHFSNLKTTFHCCFRSEQDRNCSL CADNIEGKTFVSTVNSLVFQQIDANWNIQCWLKGDCLKF  
 ICYVESL FKNLFRNYNYKVHLL YVLEPEVLEDSPLVPQKGSFQMVHCNCSVHECCECLVPVPTAKLNDTLL  
 MCLKITSGGVIFQSPLMVQPINMVKPDPPLGLHMEITDDGNLKI SWSSPPLVPFPLQYQVKYSENSTTV  
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 QSDGFYEICIFQIFLLSGYTMWIRINHSLGSLDSPPTCVLPDSVVKPLPPSSVKAETINIGLLKISWEK  
 PVFPENNLQFQIRYGLSGKEVQWKMYEVYDAKSKSVSLPVPDLCAVYAVQVRCKRLDGLGYWSNWSNPAY  
 TVVMDIKVPMRGPWFRIINGDTMKKEKNVTLWKPLMKNDLCSVQRYVINHHTSCNGTSEDVGNHTK  
 FTFLWTEQAHTVTVLAINSIGASVANFNLTFSWPMSKVNIVQSL SAYPLNSSCVIVSWILSPSDYKLMYF  
 IIEWKNLNEDGEIKWLRISSSVKKYYIHDHFIPIEKYQFSLYPIFMEGVGKPKIINSFTQDDIEKHQSDA  
 GLYVIVPVIISSELLGTLTLLISHQRMKFLWEDVPNPKNC SWAQLNFKPETFEHLFIKHTASVTCGP  
 LLLLEPETISEDISVDTSWKNKDEMPTTVVSLSTTDLEKGSVCISDQFNSVNFSEAEGTEVTEDESQR  
 QPFVKYATLINSKPSSETGEEQGLINSSVTKCFSSKNSPLKDSFSNSSWEIEAQAFFILSDQHPNII SPH  
 LTFSEGLDELLKLEGNFPEENNDKKSIIYLVGTSIKKRESGVL TDKSRVSCFPAPCLFTDIRVLQDSC  
 SHFVENNINLGTSSKTFASYMPQFQTCSTQTHKIMENKMCDLTV

TRTRPLE - GFP Tag - V

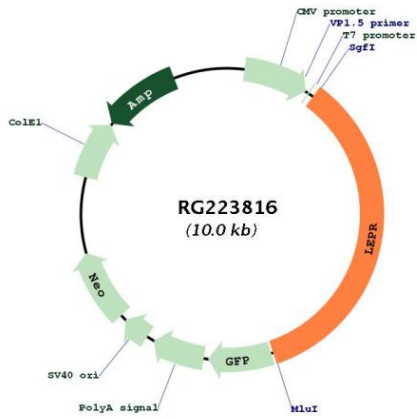
Restriction Sites: SgfI-MluI  
 Cloning Scheme:



ACCN: NM\_002303  
 ORF Size: 3495 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002303.6</a>
<b>RefSeq Size:</b>	4102 bp
<b>RefSeq ORF:</b>	3498 bp
<b>Locus ID:</b>	3953
<b>UniProt ID:</b>	<a href="#">P48357</a>
<b>Cytogenetics:</b>	1p31.3
<b>Domains:</b>	FN3
<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>	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 RG223816