

## Product datasheet for **SC127870**

### Leptin Receptor (LEPR) (NM\_002303) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Leptin Receptor (LEPR) (NM_002303) Human Untagged Clone
Tag:	Tag Free
Symbol:	Leptin Receptor
Synonyms:	CD295; LEP-R; LEPRD; OB-R; OBR
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127870 sequence for NM_002303 edited (data generated by NextGen Sequencing)

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ATGATTTGTCAAAAATTCTGTGTGGTTTTGTTACATTGGGAATTTATTTATGTGATAACT
GCGTTTAACTTGTTCATATCCAATTAAGTTGCTTGCATGCCACCA
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 TCACACTTTGTAGAAAATAATATCAACTTAGGAACTTCTAGTAAGAAGACTTTTGCATCT  
 TACATGCCTCAATTCCAACTTGTCTACTCAGACTCATAAGATCATGAAAAACAAGATG  
 TGTGACCTAACTGTGTA

Clone variation with respect to NM\_002303.5  
 326 a=>g;668 a=>g;3057 g=>a

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002303 unedited  
 TTTTGTAAACGACTCACTATAGGGCGGCCGGAATCGGCACGAGGGAGGGCGGGGGCG  
 CACGCGGGCGGCCACCCGACTCTTCCCTCCCTTCTCCCCACCCAGCCTGCTCCTGCTCA  
 GCCCCACCTCCCCACGCACTCGGCTGCCCTCCTCCTCTCCTGAGAGTTGCCCCGACCTT  
 GGGCGAGGAGTTCGGAGCGGCCCATCGCAGAGCCACGGCCAGCCGAGCGCGCGGACG  
 CAAGTGCCCGAGCCCCGGCGCCGCCATCTCTGCCTTCGGTCGAGTTGGACCCCCGGA  
 TCAAGGTGACTTCTCTGAAGTAAGATGATTTGTCAAAAATCTGTGTGGTTTTGTTACA  
 TTGGGAATTTATTTATGTGATAACTGCGTTTAACTTGTGATATCCAAATTAATCTCCTTGGAG  
 ATTTAAGTTGTCTTGCATGCCACCAAATTAACCTATGACTACTTCTTTTGCCTGCTGG  
 ACTCTCANAGAATACTTCANATTGGAATGGACATTATGAGACAGCTGTTGAACCTAAGTT  
 AATTCAAGTGGTACTCACTTTTCTTACTTATCCAAAAACTTTCCACTGTTGCTTTTTCG  
 AGTGAGCAAGATAGAAACTGCTCCTTATGTGCAGACAACATGGANGGAAGGCATTTGTTT  
 AACAGTTAATTCTTAAGTTTTCAACAATAGATGCAACTGGAACATCCTTGTGCTAAAAG  
 AAAATAN

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_002303 unedited TGGCAACTCCAGGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGGGATC TGTTTCAGGAAACAGCTATGACCCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTGGACAATTGGCAATCTAACTTTATCAGAAAGTGACCACTTTAACAT CTTTCAGATAGAAGAATTAACACTGGCATTGTTTTCAAAAGTGCTTGTGTTGCATCA AAATACTGATTGTGGGCATCACCATTCTTGCCGGGTATTCATTCTATGGGACATATCTT AGATTTGGTACATAACAATTGGCTCATTAGTCTTCACAAGTATAACCCCTTATGCCAGGG CTGAATTCGTGTTATCTTAAACATTTAGGAAAGTCCTACTTCAAATCCTACAGTCTGGTA GCGCCAAATATAAATTCCTTATATACTCTCTAAACACACAAGGACATGTGTTAAGAATGT GTGTGTGTGTGTTGGTTCAAACAAAAAAGTAAACAACACGCCTCTGAAAAACA ATAATCTCCAAAAGATGTGTCTGTTGGCTTATTCTGCTGAACAGGGACNTCCCCTAAGCT TGGATAAATAAAAAGTGGCTCATTGAGGCTATAAGCTCTAATTTTGTCTTAGGAGAC AACGCACATCTTGGACATTTN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002303
<b>Insert Size:</b>	4700 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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_002303.2</a> , <a href="#">NP_002294.2</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

**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]

Transcript Variant: This variant (1) encodes the longest isoform (1).