

## Product datasheet for **RG225025**

### MTLRP (GHRL) (NM\_001134945) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MTLRP (GHRL) (NM\_001134945) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** GHRL  
**Synonyms:** MTLRP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG225025 representing NM\_001134945  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTTACTTGCTGGTGGTCTTATCTAAGATCAACATTGGCAGCTGTGCCGGAGAGGCCTCCAGGGTCC  
AGAGAAAGGAGTCAAGAAGCCACCAGCCAAGCTGCAGCCCCGAGCTCTAGCAGGCTGGCTCCGCCCGGA  
AGATGGAGGTCAAGCAGAAGGGCAGAGGATGAACTGGAAGTCCGGTTCAACGCCCCCTTTGATGTTGGA  
ATCAAGCTGTCAAGGGTTCAGTACCAGCAGCACAGCCAGGCCCTGGGAAGTTTCTCAGGACATCTCT  
GGGAAGAGGCCAAAGAGGCCCCAGCCGACAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG225025 representing NM\_001134945  
Red=Cloning site Green=Tags(s)  
MFTCWWSYLRSTLAAVPGEASRVQRKESKPPAKLQPRALAGWLRPEDGGQAEAELEVRFNAPFDVG  
IKLSGVQYQQHSQALGKFLQDILWEEAKEAPADK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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<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_001134945.2</a>
<b>RefSeq Size:</b>	498 bp
<b>RefSeq ORF:</b>	315 bp
<b>Locus ID:</b>	51738
<b>UniProt ID:</b>	<a href="#">Q9UBU3</a>
<b>Cytogenetics:</b>	3p25.3
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Gene Summary:</b>	<p>This gene encodes the ghrelin-obestatin preproprotein that is cleaved to yield two peptides, ghrelin and obestatin. Ghrelin is a powerful appetite stimulant and plays an important role in energy homeostasis. Its secretion is initiated when the stomach is empty, whereupon it binds to the growth hormone secretagogue receptor in the hypothalamus which results in the secretion of growth hormone (somatotropin). Ghrelin is thought to regulate multiple activities, including hunger, reward perception via the mesolimbic pathway, gastric acid secretion, gastrointestinal motility, and pancreatic glucose-stimulated insulin secretion. It was initially proposed that obestatin plays an opposing role to ghrelin by promoting satiety and thus decreasing food intake, but this action is still debated. Recent reports suggest multiple metabolic roles for obestatin, including regulating adipocyte function and glucose metabolism. Alternative splicing results in multiple transcript variants. In addition, antisense transcripts for this gene have been identified and may potentially regulate ghrelin-obestatin preproprotein expression. [provided by RefSeq, Nov 2014]</p>