

## Product datasheet for **TL319562V**

### MTLRP (GHRL) Human shRNA Lentiviral Particle (Locus ID 51738)

#### Product data:

<b>Product Type:</b>	shRNA Lentiviral Particles
<b>Locus ID:</b>	51738
<b>Synonyms:</b>	MTLRP
<b>Vector:</b>	pGFP-C-shLenti (TR30023)
<b>Format:</b>	Lentiviral particles
<b>Components:</b>	GHRL - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, $>10^7$ TU/ml.
<b>RefSeq:</b>	<u><a href="#">BC025791</a></u> , <u><a href="#">NM_001134941</a></u> , <u><a href="#">NM_001134944</a></u> , <u><a href="#">NM_001134945</a></u> , <u><a href="#">NM_001134946</a></u> , <u><a href="#">NM_001302821</a></u> , <u><a href="#">NM_001302822</a></u> , <u><a href="#">NM_001302823</a></u> , <u><a href="#">NM_001302824</a></u> , <u><a href="#">NM_001302825</a></u> , <u><a href="#">NM_016362</a></u> , <u><a href="#">NR_024132</a></u> , <u><a href="#">NR_024133</a></u> , <u><a href="#">NR_024134</a></u> , <u><a href="#">NR_024135</a></u> , <u><a href="#">NR_024136</a></u> , <u><a href="#">NR_024137</a></u> , <u><a href="#">NR_024138</a></u> , <u><a href="#">NR_126505</a></u> , <u><a href="#">NM_016362.1</a></u> , <u><a href="#">NM_016362.2</a></u> , <u><a href="#">NM_016362.3</a></u> , <u><a href="#">NM_016362.4</a></u> , <u><a href="#">NM_001134946.1</a></u> , <u><a href="#">NM_001134945.1</a></u> , <u><a href="#">NM_001134944.1</a></u> , <u><a href="#">NM_001134941.1</a></u> , <u><a href="#">NM_001134941.2</a></u> , <u><a href="#">NM_001302823.1</a></u> , <u><a href="#">NM_001302821.1</a></u> , <u><a href="#">NM_001302822.1</a></u> , <u><a href="#">NM_001302824.1</a></u> , <u><a href="#">NM_001302825.1</a></u> , <u><a href="#">BC025791.1</a></u> , <u><a href="#">BM854032</a></u> , <u><a href="#">NM_001134945.2</a></u> , <u><a href="#">NM_001134946.2</a></u> , <u><a href="#">NM_001302823.2</a></u> , <u><a href="#">NM_001134941.3</a></u> , <u><a href="#">NM_001134944.2</a></u> , <u><a href="#">NM_016362.5</a></u>
<b>UniProt ID:</b>	<u><a href="#">Q9UBU3</a></u>



**Summary:**

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]

**shRNA Design:**

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**Performance Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).