

## Product datasheet for **TL310142**

### LONP1 Human shRNA Plasmid Kit (Locus ID 9361)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	LONP1 Human shRNA Plasmid Kit (Locus ID 9361)
Locus ID:	9361
Synonyms:	CODASS; hLON; LON; LonHS; LONP; PIM1; PRSS15
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	LONP1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 9361). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001276479</a> , <a href="#">NM_001276480</a> , <a href="#">NM_004793</a> , <a href="#">NR_076392</a> , <a href="#">NM_004793.1</a> , <a href="#">NM_004793.2</a> , <a href="#">NM_004793.3</a> , <a href="#">NM_001276480.1</a> , <a href="#">NM_001276479.1</a> , <a href="#">BC000235</a> , <a href="#">BC000235.1</a> , <a href="#">BC109218</a> , <a href="#">BC109219</a> , <a href="#">BC139726</a> , <a href="#">NM_004793.4</a> , <a href="#">NM_001276479.2</a>
UniProt ID:	<a href="#">P36776</a>
Summary:	This gene encodes a mitochondrial matrix protein that belongs to the Lon family of ATP-dependent proteases. This protein mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides in the mitochondrial matrix. It may also have a chaperone function in the assembly of inner membrane protein complexes, and participate in the regulation of mitochondrial gene expression and maintenance of the integrity of the mitochondrial genome. Decreased expression of this gene has been noted in a patient with hereditary spastic paraplegia (PMID:18378094). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Feb 2013]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .

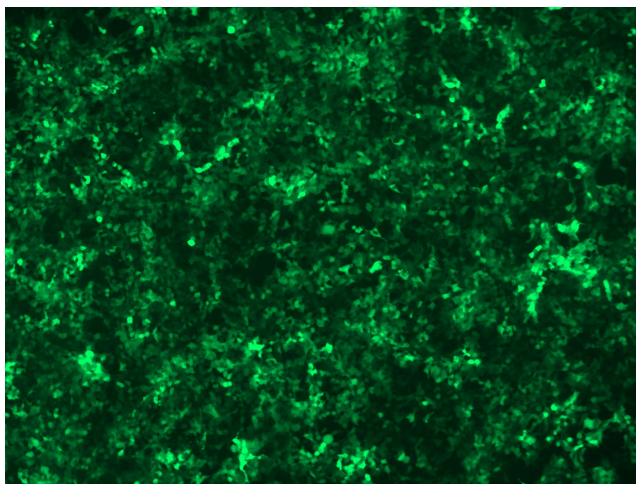


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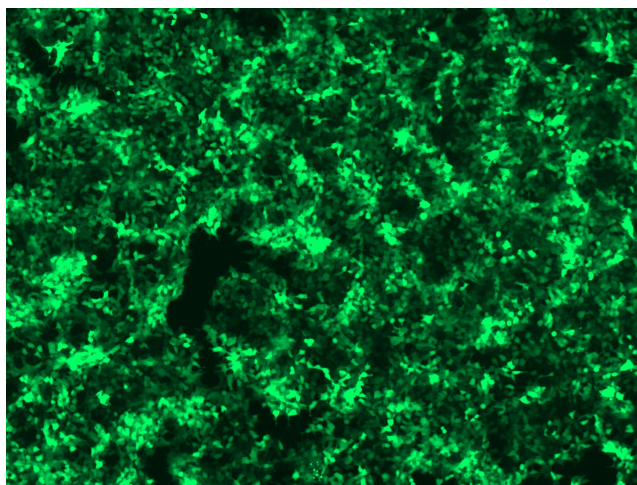
**Performance  
Guaranteed:**

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).

**Product images:**

GFP signal was observed under microscope at 48 hours after transduction of TL310142A virus into HEK293 cells. TL310142A virus was prepared using lenti-shRNA TL310142A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL310142B virus into HEK293 cells. TL310142B virus was prepared using lenti-shRNA TL310142B and [TR30037] packaging kit.