

## **Product datasheet for TL311010**

## OriGene Technologies, Inc.

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## **Optineurin (OPTN) Human shRNA Plasmid Kit (Locus ID 10133)**

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Optineurin (OPTN) Human shRNA Plasmid Kit (Locus ID 10133)

**Locus ID:** 10133

Synonyms: ALS12; FIP2; GLC1E; HIP7; HYPL; NRP; TFIIIA-INTP

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/m

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Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** OPTN - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 10133).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001008211, NM 001008212, NM 001008213, NM 021980, NM 001008211.1,

NM 001008212.1, NM 021980.1, NM 021980.2, NM 021980.3, NM 021980.4,

NM 001008213.1, BC013876, BC013876.2, BC032762, NM 001008212.2

UniProt ID: Q96CV9

**Summary:** This gene encodes the coiled-coil containing protein optineurin. Optineurin may play a role in

normal-tension glaucoma and adult-onset primary open angle glaucoma. Optineurin interacts with adenovirus E3-14.7K protein and may utilize tumor necrosis factor-alpha or Fas-ligand pathways to mediate apoptosis, inflammation or vasoconstriction. Optineurin may also function in cellular morphogenesis and membrane trafficking, vesicle trafficking, and transcription activation through its interactions with the RAB8, huntingtin, and transcription factor IIIA proteins. Alternative splicing results in multiple transcript variants encoding the

same protein. [provided by RefSeq, Jul 2008]

**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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.



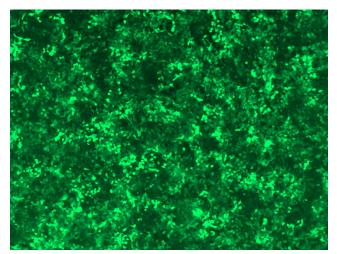


### Performance Guaranteed:

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.

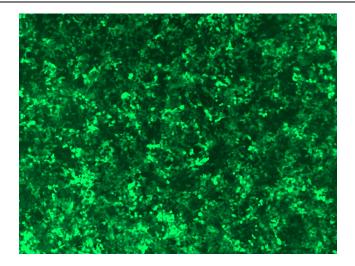
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

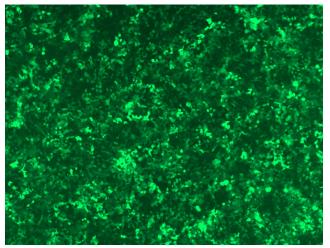


GFP signal was observed under microscope at 48 hours after transduction of TL311010A virus into HEK293 cells. TL311010A virus was prepared using lenti-shRNA TL311010A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of TL311010B virus into HEK293 cells. TL311010B virus was prepared using lenti-shRNA TL311010B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL311010C] virus into HEK293 cells. [TL311010C] virus was prepared using lenti-shRNA [TL311010C] and [TR30037] packaging kit.