

## **Product datasheet for TL313266**

#### OriGene Technologies, Inc.

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### GCN2 (EIF2AK4) Human shRNA Plasmid Kit (Locus ID 440275)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** GCN2 (EIF2AK4) Human shRNA Plasmid Kit (Locus ID 440275)

**Locus ID:** 440275

Synonyms: GCN2; PVOD2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell Puromycin

Selection: Format:

Lentiviral plasmids

Components: EIF2AK4 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

440275). 5µg purified plasmid DNA per construct

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

**RefSeq:** NM 001013703, NM 001013703.1, NM 001013703.2, NM 001013703.3, BC009350, BC014915,

BC019914, BC061591, BC078179, BC146319

UniProt ID: Q9P2K8

Summary: This gene encodes a member of a family of kinases that phosphorylate the alpha subunit of

eukaryotic translation initiation factor-2 (EIF2), resulting in the downregulaton of protein synthesis. The encoded protein responds to amino acid deprivation by binding uncharged transfer RNAs. It may also be activated by glucose deprivation and viral infection. Mutations in this gene have been found in individuals suffering from autosomal recessive pulmonary

venoocclusive-disease-2. [provided by RefSeq, Mar 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.

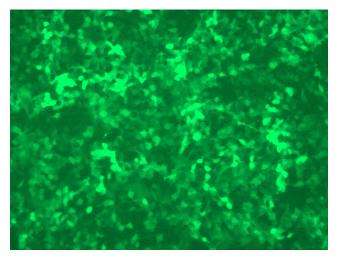


### Performance Guaranteed:

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.

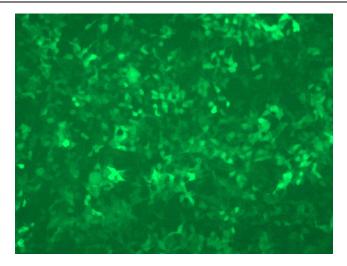
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

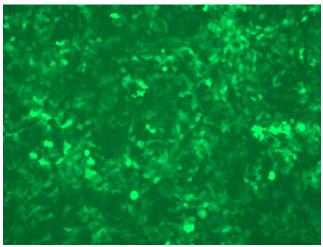


GFP signal was observed under microscope at 48 hours after transduction of TL313266A virus into HEK293 cells. TL313266A virus was prepared using lenti-shRNA TL313266A and [TR30037] packaging kit.

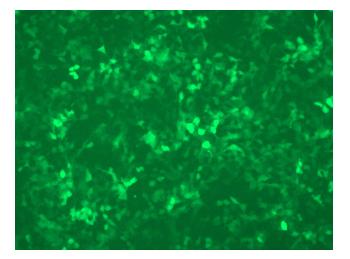




GFP signal was observed under microscope at 48 hours after transduction of TL313266B virus into HEK293 cells. TL313266B virus was prepared using lenti-shRNA TL313266B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL313266C] virus into HEK293 cells. [TL313266C] virus was prepared using lenti-shRNA [TL313266C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL313266D] virus into HEK293 cells. [TL313266D] virus was prepared using lenti-shRNA [TL313266D] and [TR30037] packaging kit.