

## Product datasheet for **TL310503**

### PER2 Human shRNA Plasmid Kit (Locus ID 8864)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	PER2 Human shRNA Plasmid Kit (Locus ID 8864)
Locus ID:	8864
Synonyms:	FASPS; FASPS, KIAA0347; KIAA0347; period, Drosophila, homolog of, 2; period 2; period circadian protein 2; period homolog 2 (Drosophila)
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	PER2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 8864). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_003894</a> , <a href="#">NM_022817</a> , <a href="#">NM_022817.1</a> , <a href="#">NM_022817.2</a> , <a href="#">NM_003894.3</a> , <a href="#">BC111453</a> , <a href="#">NM_022817.3</a>
UniProt ID:	<a href="#">O15055</a>
Summary:	This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. Genes in this family encode components of the circadian rhythms of locomotor activity, metabolism, and behavior. This gene is upregulated by CLOCK/ARNTL heterodimers but then represses this upregulation in a feedback loop using PER/CRY heterodimers to interact with CLOCK/ARNTL. Polymorphisms in this gene may increase the risk of getting certain cancers and have been linked to sleep disorders. [provided by RefSeq, Jan 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 <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> .

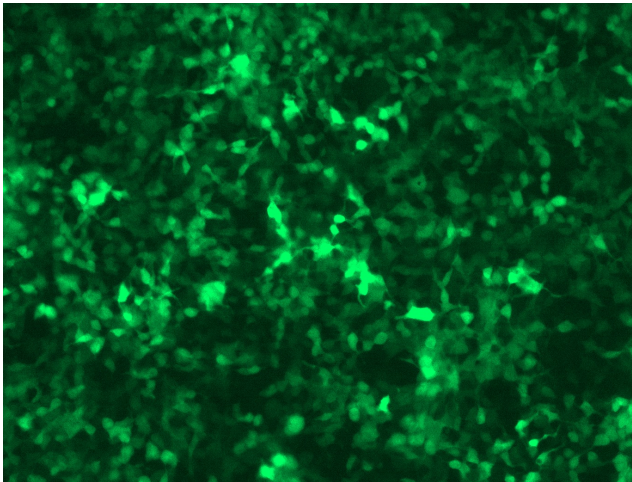


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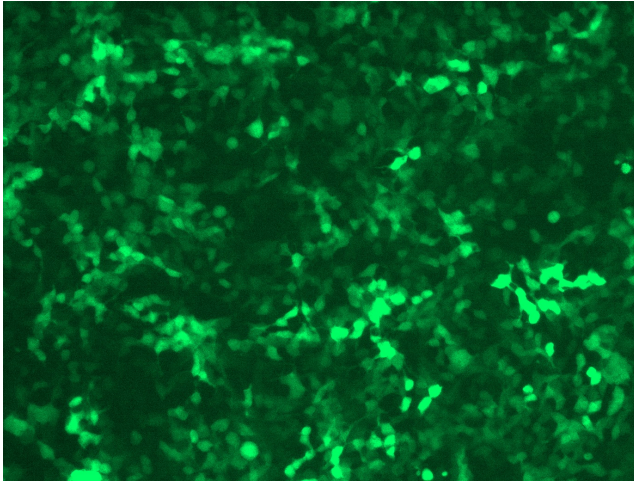
**Performance  
Guaranteed:**

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.

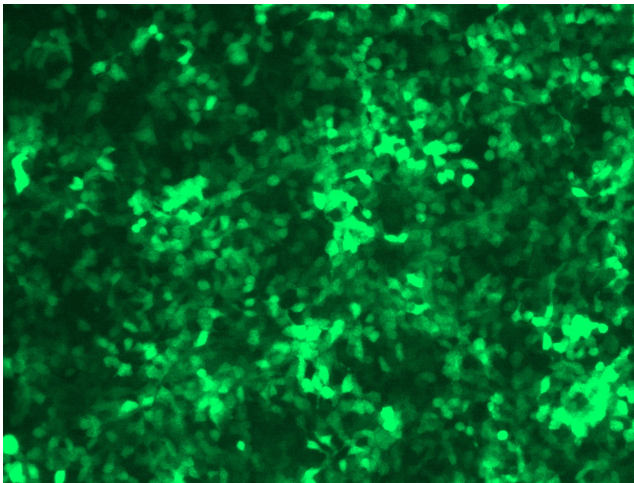
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). 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:**

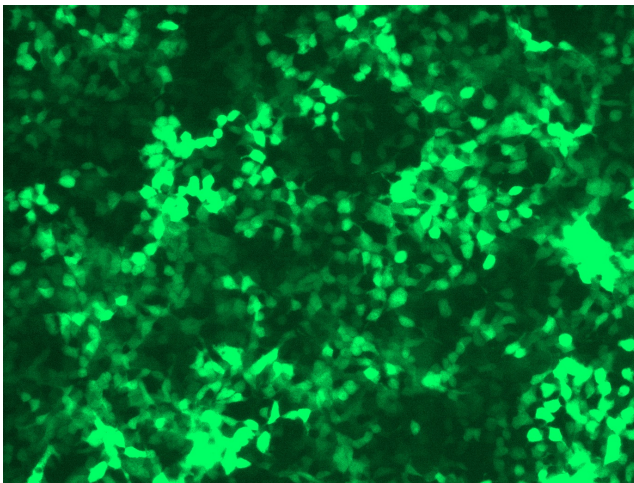
GFP signal was observed under microscope at 48 hours after transduction of TL310503A virus into HEK293 cells. TL310503A virus was prepared using lenti-shRNA TL310503A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL310503B virus into HEK293 cells. TL310503B virus was prepared using lenti-shRNA TL310503B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310503C] virus into HEK293 cells. [TL310503C] virus was prepared using lenti-shRNA [TL310503C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310503D] virus into HEK293 cells. [TL310503D] virus was prepared using lenti-shRNA [TL310503D] and [TR30037] packaging kit.