

## Product datasheet for **TL303637**

### KLC1 Human shRNA Plasmid Kit (Locus ID 3831)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	KLC1 Human shRNA Plasmid Kit (Locus ID 3831)
Locus ID:	3831
Synonyms:	KLC; KNS2; KNS2A
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	KLC1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3831). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001130107</a> , <a href="#">NM_005552</a> , <a href="#">NM_182923</a> , <a href="#">NM_005552.1</a> , <a href="#">NM_005552.2</a> , <a href="#">NM_005552.3</a> , <a href="#">NM_005552.4</a> , <a href="#">NM_182923.1</a> , <a href="#">NM_182923.2</a> , <a href="#">NM_182923.3</a> , <a href="#">NM_001130107.1</a> , <a href="#">BC008881</a> , <a href="#">BC008881.2</a> , <a href="#">BM988840</a>
UniProt ID:	<a href="#">Q07866</a>
Summary:	Conventional kinesin is a tetrameric molecule composed of two heavy chains and two light chains, and transports various cargos along microtubules toward their plus ends. The heavy chains provide the motor activity, while the light chains bind to various cargos. This gene encodes a member of the kinesin light chain family. It associates with kinesin heavy chain through an N-terminal domain, and six tetratricopeptide repeat (TPR) motifs are thought to be involved in binding of cargos such as vesicles, mitochondria, and the Golgi complex. Thus, kinesin light chains function as adapter molecules and not motors per se. Although previously named "kinesin 2", this gene is not a member of the kinesin-2 / kinesin heavy chain subfamily of kinesin motor proteins. Extensive alternative splicing produces isoforms with different C-termini that are proposed to bind to different cargos; however, the full-length nature and/or biological validity of most of these variants have not been determined. [provided by RefSeq, Jul 2008]



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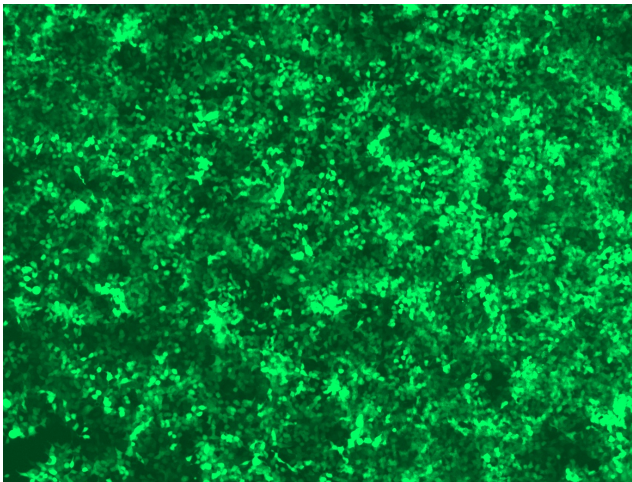
**shRNA Design:**

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](#).

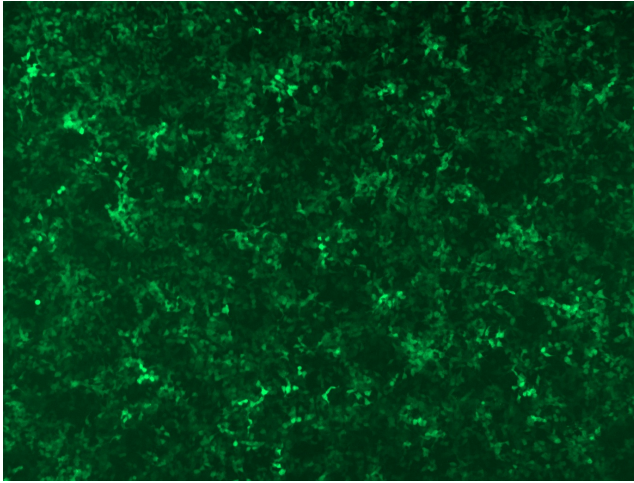
**Performance Guaranteed:**

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.

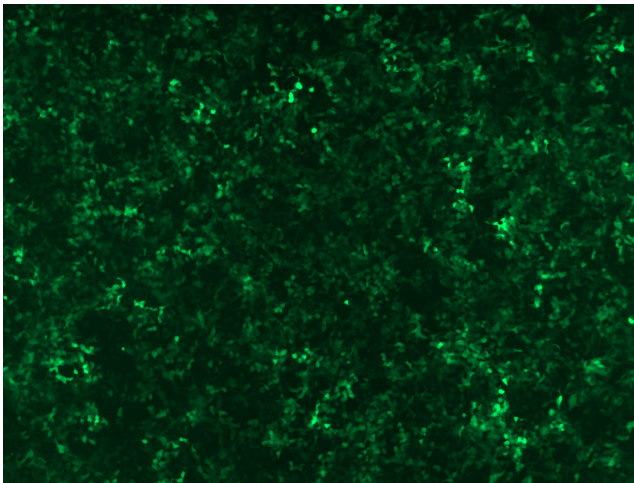
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com).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

**Product images:**

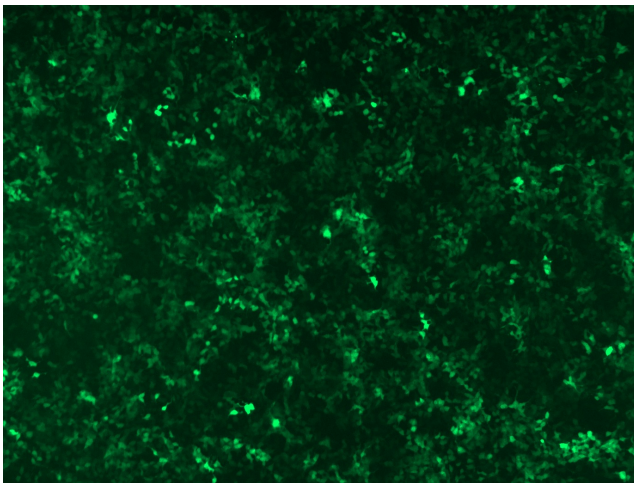
GFP signal was observed under microscope at 48 hours after transduction of TL303637A virus into HEK293 cells. TL303637A virus was prepared using lenti-shRNA TL303637A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL303637B virus into HEK293 cells. TL303637B virus was prepared using lenti-shRNA TL303637B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL303637C] virus into HEK293 cells. [TL303637C] virus was prepared using lenti-shRNA [TL303637C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL303637D] virus into HEK293 cells. [TL303637D] virus was prepared using lenti-shRNA [TL303637D] and [TR30037] packaging kit.