

## Product datasheet for **TL309000**

### **SURF1 Human shRNA Plasmid Kit (Locus ID 6834)**

#### **Product data:**

|                                  |  |
|----------------------------------|--|
| <b>Product Type:</b>             | shRNA Plasmids   |
| <b>Product Name:</b>             | SURF1 Human shRNA Plasmid Kit (Locus ID 6834)  |
| <b>Locus ID:</b>                 | 6834   |
| <b>Synonyms:</b>                 | CMT4K; MC4DN1; SHY1  |
| <b>Vector:</b>                   | pGFP-C-shLenti (TR30023)   |
| <b>E. coli Selection:</b>        | Chloramphenicol (34 ug/ml)   |
| <b>Mammalian Cell Selection:</b> | Puromycin  |
| <b>Format:</b>                   | Lentiviral plasmids  |
| <b>Components:</b>               | SURF1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6834).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.  |
| <b>RefSeq:</b>                   | <a href="#">NM_001280787</a> , <a href="#">NM_003172</a> , <a href="#">NM_003172.1</a> , <a href="#">NM_003172.2</a> , <a href="#">NM_003172.3</a> , <a href="#">NM_001280787.1</a> , <a href="#">BC071658</a> , <a href="#">BC071658.1</a> , <a href="#">BC028314</a> , <a href="#">BM542342</a> , <a href="#">NM_003172.4</a>  |
| <b>UniProt ID:</b>               | <a href="#">Q15526</a>   |
| <b>Summary:</b>                  | This gene encodes a protein localized to the inner mitochondrial membrane and thought to be involved in the biogenesis of the cytochrome c oxidase complex. The protein is a member of the SURF1 family, which includes the related yeast protein SHY1 and rickettsial protein RP733. The gene is located in the surfeit gene cluster, a group of very tightly linked genes that do not share sequence similarity, where it shares a bidirectional promoter with SURF2 on the opposite strand. Defects in this gene are a cause of Leigh syndrome, a severe neurological disorder that is commonly associated with systemic cytochrome c oxidase deficiency.<br>[provided by RefSeq, Jul 2008] |
| <b>shRNA Design:</b>             | 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> .   |

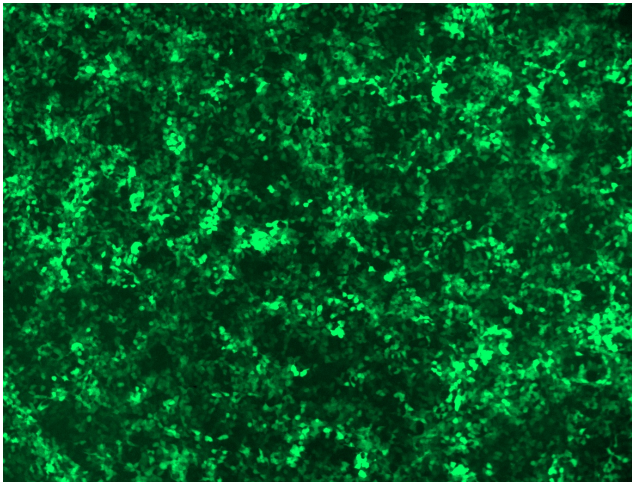


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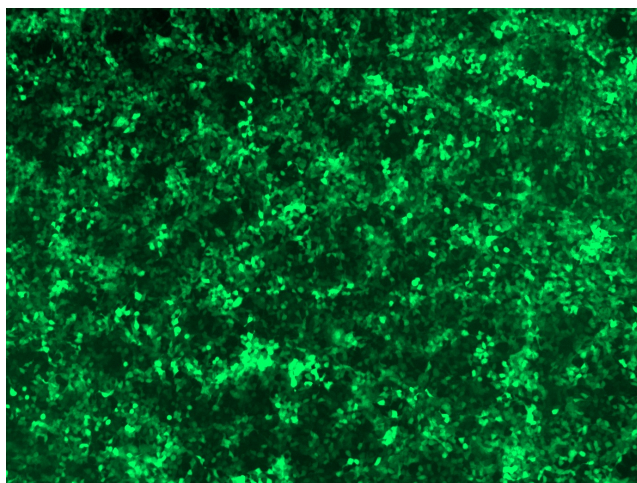
**Performance  
Guaranteed:**

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.

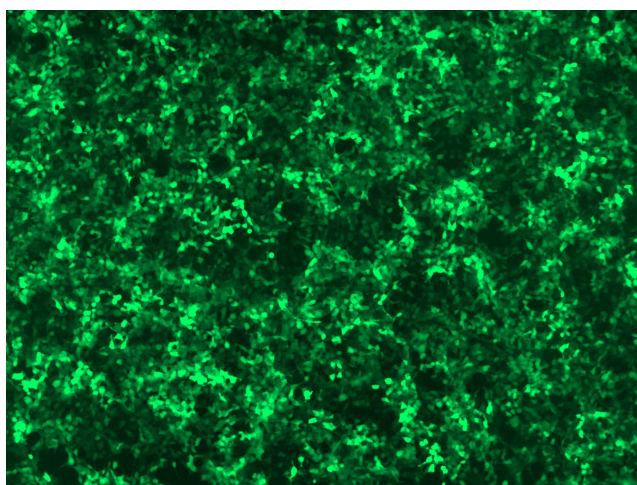
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). 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 TL309000B virus into HEK293 cells. TL309000B virus was prepared using lenti-shRNA TL309000B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309000C] virus into HEK293 cells. [TL309000C] virus was prepared using lenti-shRNA [TL309000C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL309000D] virus into HEK293 cells. [TL309000D] virus was prepared using lenti-shRNA [TL309000D] and [TR30037] packaging kit.