

## Product datasheet for TL513281V

#### OriGene Technologies, Inc.

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### **Gba Mouse shRNA Lentiviral Particle (Locus ID 14466)**

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** Gba Mouse shRNA Lentiviral Particle (Locus ID 14466)

**Locus ID:** 14466

**Synonyms:** betaGC; GBA1; GC; GCase; GLUC

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Gba - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: BC006663, NM 001077411, NM 008094, NR 122037, NM 008094.1, NM 008094.2,

NM 008094.3, NM 008094.4, NM 008094.5, NM 001077411.1, NM 001077411.2

UniProt ID: P17439

**Summary:** Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of

glucosylceramide/GlcCer into free ceramide and glucose (PubMed:24211208). Thereby, plays a central role in the degradation of complex lipids and the turnover of cellular membranes (PubMed:27378698). Through the production of ceramides, participates to the PKC-activated

salvage pathway of ceramide formation (By similarity). Also plays a role in cholesterol metabolism (PubMed:24211208). May either catalyze the glucosylation of cholesterol, through a transglucosylation reaction that transfers glucose from glucosylceramide to cholesterol (PubMed:24211208). The short chain saturated C8:0-GlcCer and the monounsaturated C18:0-GlcCer being the most effective glucose donors for that transglucosylation

reaction (By similarity). Under specific conditions, may alternatively catalyze the reverse reaction, transferring glucose from cholesteryl-beta-D-glucoside to ceramide (By similarity). Finally, may also hydrolyze cholesteryl-beta-D-glucoside to produce D-glucose and cholesterol

(By similarity).[UniProtKB/Swiss-Prot Function]

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>.



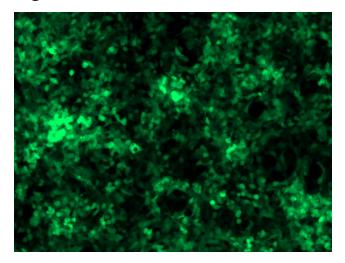


### Performance Guaranteed:

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.

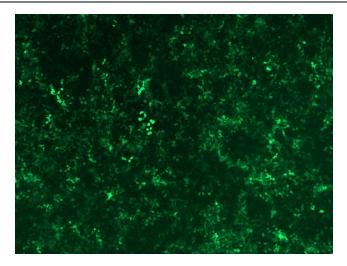
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

# **Product images:**

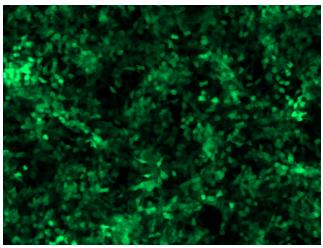


GFP signal was observed under microscope at 48 hours after transduction of TL513281A virus into HEK293 cells. TL513281A virus was prepared using lenti-shRNA TL513281A and [TR30037] packaging kit.

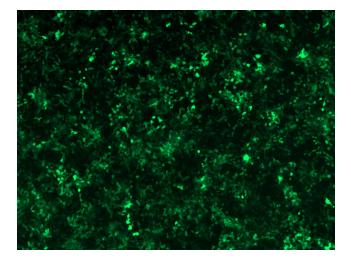




GFP signal was observed under microscope at 48 hours after transduction of TL513281A virus into HEK293 cells. TL513281A virus was prepared using lenti-shRNA TL513281A and [TR30037] packaging kit.

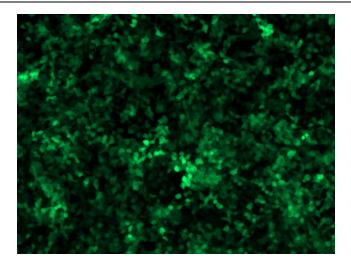


GFP signal was observed under microscope at 48 hours after transduction of TL513281B virus into HEK293 cells. TL513281B virus was prepared using lenti-shRNA TL513281B and [TR30037] packaging kit.

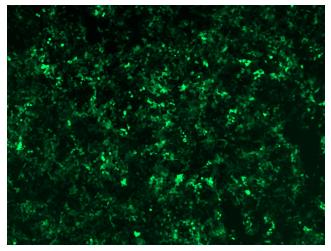


GFP signal was observed under microscope at 48 hours after transduction of TL513281B virus into HEK293 cells. TL513281B virus was prepared using lenti-shRNA TL513281B and [TR30037] packaging kit.

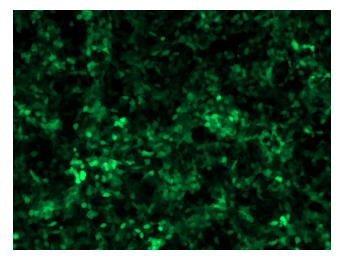




GFP signal was observed under microscope at 48 hours after transduction of [TL513281C] virus into HEK293 cells. [TL513281C] virus was prepared using lenti-shRNA [TL513281C] and [TR30037] packaging kit.

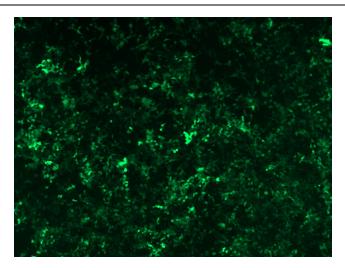


GFP signal was observed under microscope at 48 hours after transduction of [TL513281C] virus into HEK293 cells. [TL513281C] virus was prepared using lenti-shRNA [TL513281C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL513281D] virus into HEK293 cells. [TL513281D] virus was prepared using lenti-shRNA [TL513281D] and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL513281D] virus into HEK293 cells. [TL513281D] virus was prepared using lenti-shRNA [TL513281D] and [TR30037] packaging kit.