

Product datasheet for TR513281

Gba Mouse shRNA Plasmid (Locus ID 14466)

Product data:

Product Type: shRNA Plasmids

Product Name: Gba Mouse shRNA Plasmid (Locus ID 14466)

Locus ID: 14466

Synonyms: betaGC; GBA1; GC; GCase; GLUC

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: Gba - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

14466). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

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]



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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. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).