

Product datasheet for TL502089V

OriGene Technologies, Inc.

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Snca Mouse shRNA Lentiviral Particle (Locus ID 20617)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Snca Mouse shRNA Lentiviral Particle (Locus ID 20617)

Locus ID: 20617

Synonyms: alpha-Syn; alphaSYN; NACP

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

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

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

RefSeq: <u>BC046764, NM_001042451, NM_009221, NM_001042451.1, NM_001042451.2, NM_009221.1,</u>

NM 009221.2

UniProt ID: O55042

Summary: Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic

vesicle trafficking and subsequent neurotransmitter release. Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores. Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis. Acts also as a molecular chaperone in its multimeric membrane-bound state, assisting in the folding of synaptic fusion

components called SNAREs (Soluble NSF Attachment Protein REceptors) at presynaptic

plasma membrane in conjunction with cysteine string protein-alpha/DNAJC5

(PubMed:20798282, PubMed:25246573). This chaperone activity is important to sustain normal SNARE-complex assembly during aging. Plays also a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and

thereby modulating its activity (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>.



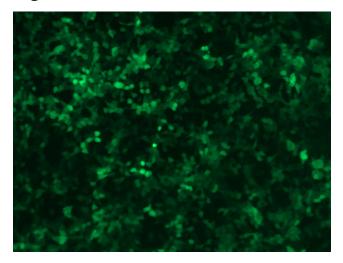


Performance Guaranteed:

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.

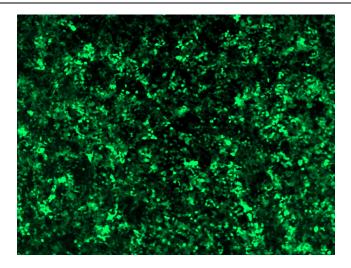
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

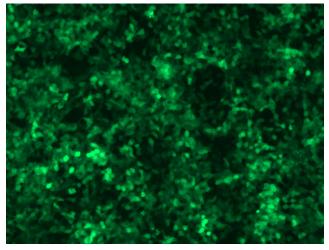


GFP signal was observed under microscope at 48 hours after transduction of TL502089A virus into HEK293 cells. TL502089A virus was prepared using lenti-shRNA TL502089A and [TR30037] packaging kit.

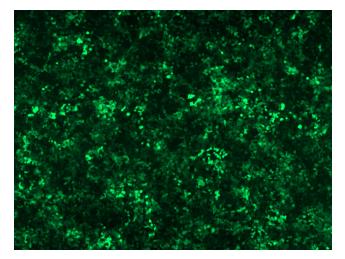




GFP signal was observed under microscope at 48 hours after transduction of TL502089A virus into HEK293 cells. TL502089A virus was prepared using lenti-shRNA TL502089A and [TR30037] packaging kit.

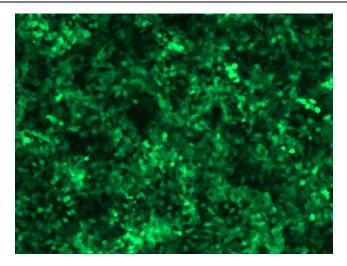


GFP signal was observed under microscope at 48 hours after transduction of TL502089B virus into HEK293 cells. TL502089B virus was prepared using lenti-shRNA TL502089B and [TR30037] packaging kit.

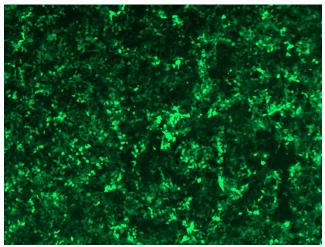


GFP signal was observed under microscope at 48 hours after transduction of TL502089B virus into HEK293 cells. TL502089B virus was prepared using lenti-shRNA TL502089B and [TR30037] packaging kit.

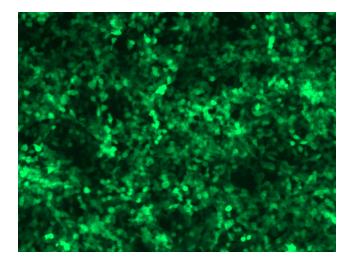




GFP signal was observed under microscope at 48 hours after transduction of [TL502089C] virus into HEK293 cells. [TL502089C] virus was prepared using lenti-shRNA [TL502089C] and [TR30037] packaging kit.

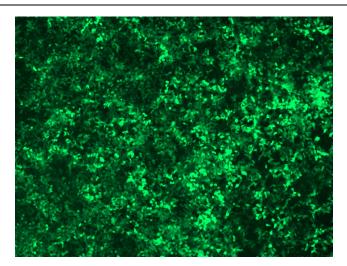


GFP signal was observed under microscope at 48 hours after transduction of [TL502089C] virus into HEK293 cells. [TL502089C] virus was prepared using lenti-shRNA [TL502089C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL502089D] virus into HEK293 cells. [TL502089D] virus was prepared using lenti-shRNA [TL502089D] and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of [TL502089D] virus into HEK293 cells. [TL502089D] virus was prepared using lenti-shRNA [TL502089D] and [TR30037] packaging kit.