OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TL517485

Syne2 Mouse shRNA Plasmid (Locus ID 319565)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Syne2 Mouse shRNA Plasmid (Locus ID 319565)
Locus ID:	319565
Synonyms:	6820443O06Rik; AW546258; Cpfl8; D12Ertd777e; dice; mKIAA1011; Nesp2g; NUA
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Syne2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 319565). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_001005510, BC010723, BC028837, BC037241, BC042604, BC055031, BC076568, BC082586

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Summary:

Multi-isomeric modular protein which forms a linking network between organelles and the actin cytoskeleton to maintain the subcellular spatial organization. As a component of the LINC (LInker of Nucleoskeleton and Cytoskeleton) complex involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning. Specifically, SYNE2 and SUN2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear movement. May be involved in nucleus-centrosome attachment. During interkinetic nuclear migration (INM) at G2 phase and nuclear migration in neural progenitors its LINC complex association with SUN1/2 and probable association with cytoplasmic dynein-dynactin motor complexes functions to pull the nucleus toward the centrosome; SYNE1 and SYNE2 seem to act redundantly in cerebellum, midbrain, brain stem, and other brain regions except cerebral cortex and hippocampus. During INM at G1 phase mediates respective LINC complex association with kinesin to push the nucleus away from the centrosome. Involved in nuclear migration in retinal photoreceptor progenitors. Required for centrosome migration to the apical cell surface during early ciliogenesis.[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 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).

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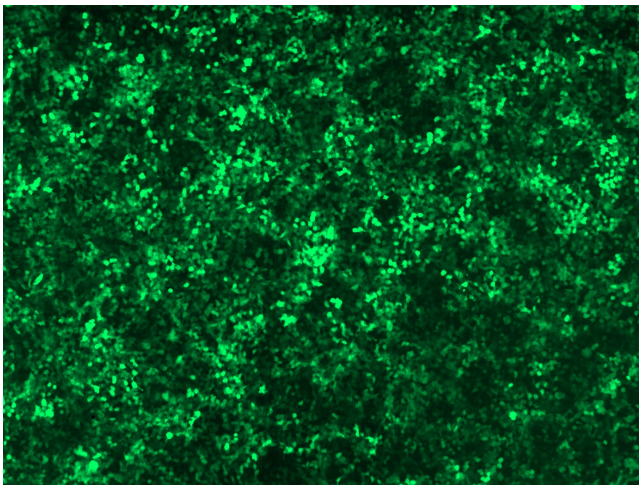
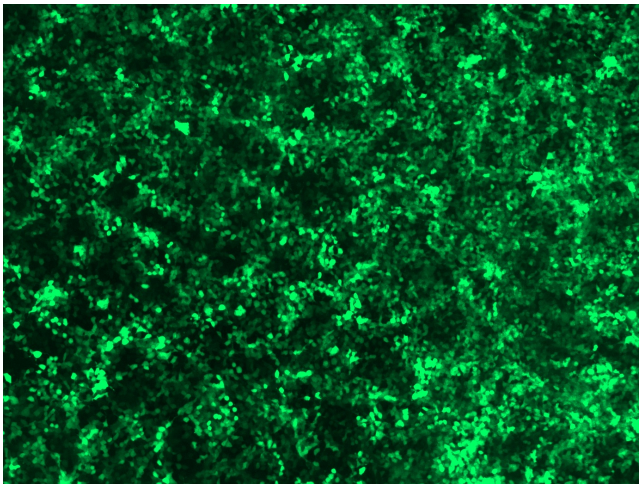
Product images:



GFP signal was observed under microscope at 48 hours after transduction of TL517485A virus into HEK293 cells. TL517485A virus was prepared using lenti-shRNA TL517485A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL517485B virus into HEK293 cells. TL517485B virus was prepared using lenti-shRNA TL517485B and [TR30037] packaging kit.

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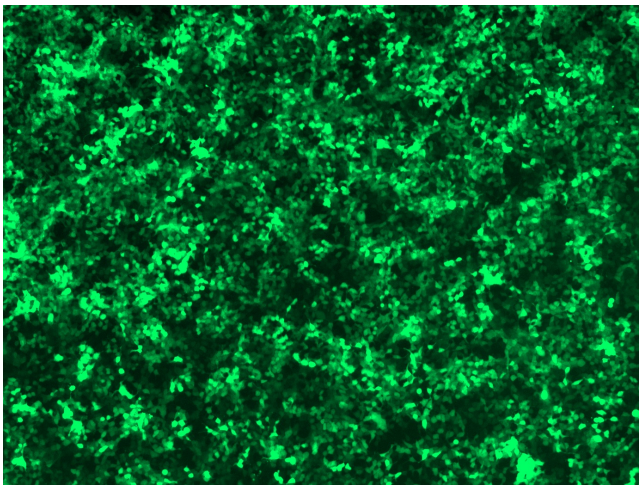
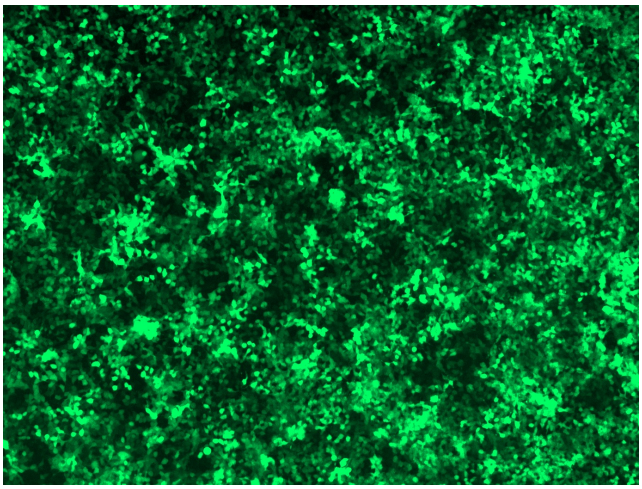


GFP signal was observed under microscope at 48 hours after transduction of [TL517485C] virus into HEK293 cells. [TL517485C] virus was prepared using lenti-shRNA [TL517485C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL517485D] virus into HEK293 cells. [TL517485D] virus was prepared using lenti-shRNA [TL517485D] and [TR30037] packaging kit.

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