

Product datasheet for TL514641V

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

Dnmt1 Mouse shRNA Lentiviral Particle (Locus ID 13433)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Dnmt1 Mouse shRNA Lentiviral Particle (Locus ID 13433)

Locus ID: 13433

Synonyms: Cxxc9; Dnmt; Dnmt10; m.Mmul; MCMT; Met-1; Met1; MommeD; MommeD2; MTa; MTase

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Dnmt1 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC048148, BC053047, NM 001199431, NM 001199432, NM 001199433, NM 010066,</u>

NM 010066.1, NM 010066.2, NM 010066.3, NM 010066.4, NM 001199432.1,

NM 001199433.1, NM 001199431.1, BC053047.1, BC022927, BC119483

UniProt ID: P13864

Summary: This gene encodes a methyltransferase that preferentially methylates cytosines of CpG

residues in hemimethylated DNA to generate fully methylated CpG base pairs during DNA

replication. This enzyme plays roles in diverse cellular processes including cell cycle

regulation, DNA repair, and telomere maintenance. The encoded protein is composed of an N-terminal domain with a nuclear localization sequence and replication fork-targeting

domain, a DNA-binding CXXC domain, two bromo-adjacent homology domains, and a C-terminal catalytic domain. Mouse embryonic stem cells mutant for this gene are viable, but when introduced into the germ line, cause a recessive lethal phenotype with mutant embryos displaying stunted growth and developmental defects. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, Sep 2015]

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>.



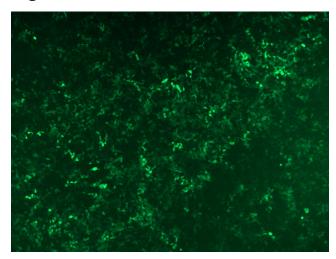


Performance Guaranteed:

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.

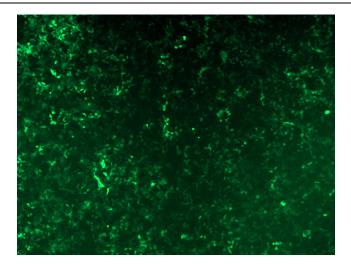
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

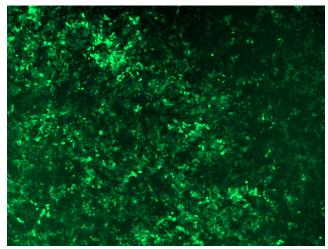


GFP signal was observed under microscope at 48 hours after transduction of TL514641A virus into HEK293 cells. TL514641A virus was prepared using lenti-shRNA TL514641A and [TR30037] packaging kit.

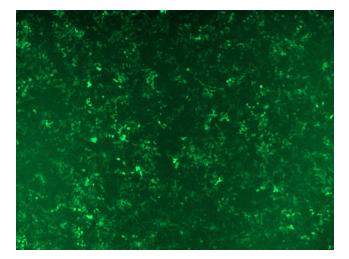




GFP signal was observed under microscope at 48 hours after transduction of TL514641B virus into HEK293 cells. TL514641B virus was prepared using lenti-shRNA TL514641B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL514641C] virus into HEK293 cells. [TL514641C] virus was prepared using lenti-shRNA [TL514641C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL514641D] virus into HEK293 cells. [TL514641D] virus was prepared using lenti-shRNA [TL514641D] and [TR30037] packaging kit.