

Product datasheet for TL314229V

OriGene Technologies, Inc.

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CAD Human shRNA Lentiviral Particle (Locus ID 790)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: CAD Human shRNA Lentiviral Particle (Locus ID 790)

Locus ID: 790

Synonyms: CDG1Z; DEE50; EIEE50; GATD4

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

CAD - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

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

RefSeq: <u>BC014178, NM 001306079, NM 004341.1, NM 004341.1, NM 004341.2, NM 004341.3,</u>

NM 004341.4, BC065510, BC065510.1, BM927624, NM 004341.5

UniProt ID: P27708

Summary: The de novo synthesis of pyrimidine nucleotides is required for mammalian cells to

proliferate. This gene encodes a trifunctional protein which is associated with the enzymatic

activities of the first 3 enzymes in the 6-step pathway of pyrimidine biosynthesis:

carbamoylphosphate synthetase (CPS II), aspartate transcarbamoylase, and dihydroorotase. This protein is regulated by the mitogen-activated protein kinase (MAPK) cascade, which indicates a direct link between activation of the MAPK cascade and de novo biosynthesis of pyrimidine nucleotides. Alternative splicing results in multiple transcript variants encoding

different isoforms. [provided by RefSeq, Apr 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>.



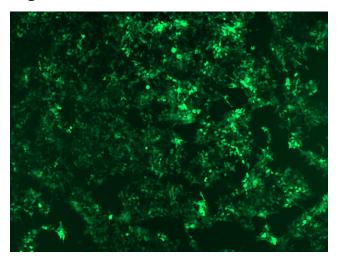


Performance Guaranteed:

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.

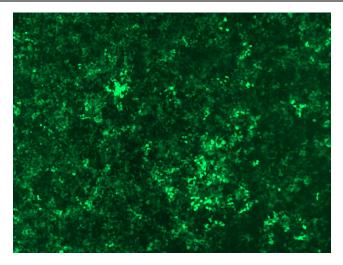
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

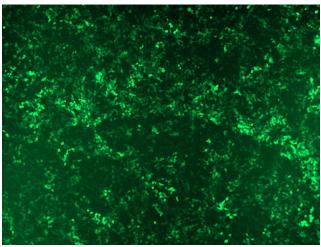


GFP signal was observed under microscope at 48 hours after transduction of TL314229A virus into HEK293 cells. TL314229A virus was prepared using lenti-shRNA TL314229A and [TR30037] packaging kit.

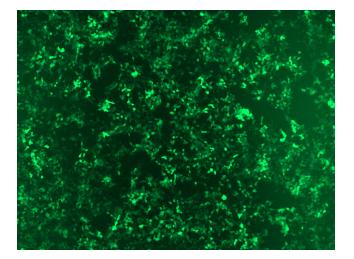




GFP signal was observed under microscope at 48 hours after transduction of TL314229B virus into HEK293 cells. TL314229B virus was prepared using lenti-shRNA TL314229B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314229C] virus into HEK293 cells. [TL314229C] virus was prepared using lenti-shRNA [TL314229C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL314229D] virus into HEK293 cells. [TL314229D] virus was prepared using lenti-shRNA [TL314229D] and [TR30037] packaging kit.