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Product datasheet for TL312261V

Isocitrate dehydrogenase (IDH1) Human shRNA Lentiviral Particle (Locus ID 3417)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	Isocitrate dehydrogenase (IDH1) Human shRNA Lentiviral Particle (Locus ID 3417)
Locus ID:	3417
Synonyms:	HEL-216; HEL-S-26; IDCD; IDH; IDP; IDPC; PICD
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	IDH1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	NM_001282386, NM_001282387, NM_005896, NM_005896.1, NM_005896.2, NM_005896.3, NM_001282386.1, NM_001282387.1, BC093020, BC012846, BC021046, NM_005896.4
UniProt ID:	O75874
Summary:	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2013]
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.

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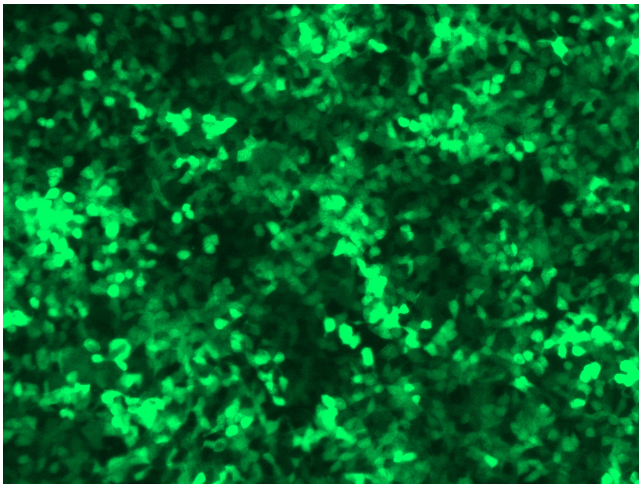
Performance Guaranteed:

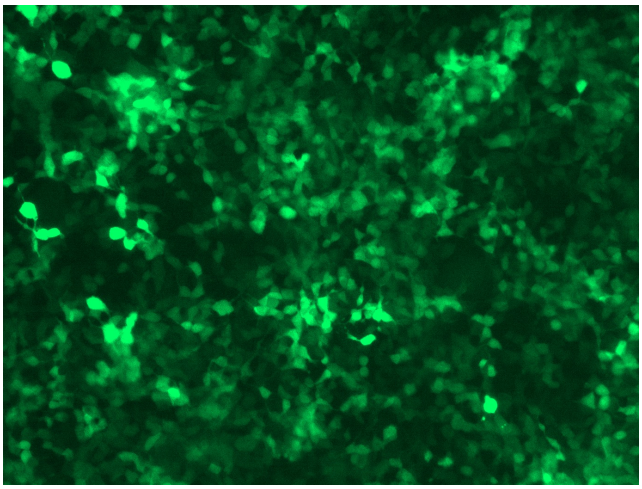
OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. 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).

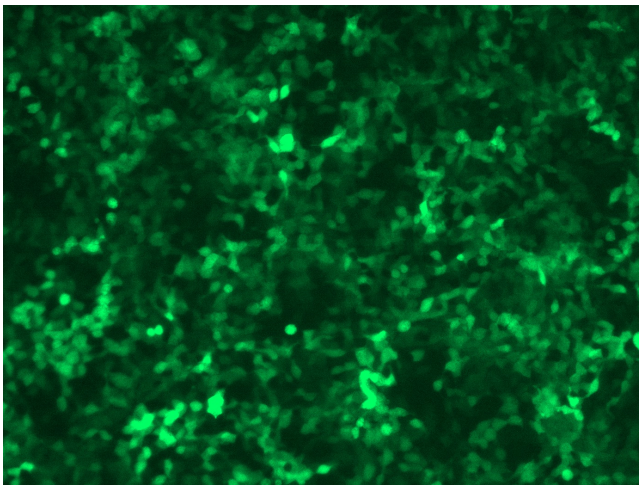
Product images:



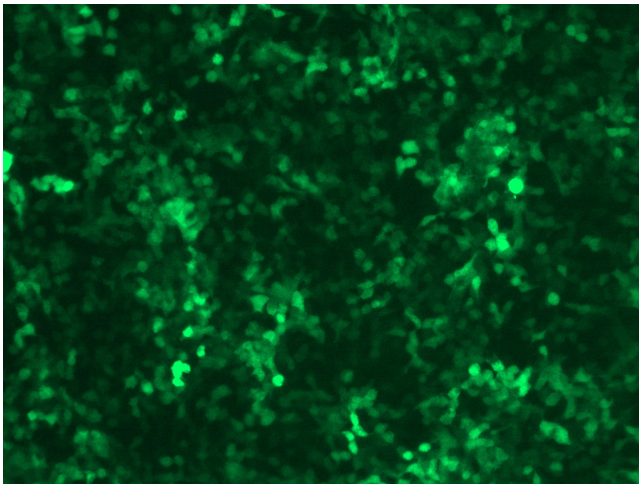
GFP signal was observed under microscope at 48 hours after transduction of TL312261A virus into HEK293 cells. TL312261A virus was prepared using lenti-shRNA TL312261A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL312261B virus into HEK293 cells. TL312261B virus was prepared using lenti-shRNA TL312261B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312261C] virus into HEK293 cells. [TL312261C] virus was prepared using lenti-shRNA [TL312261C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312261D] virus into HEK293 cells. [TL312261D] virus was prepared using lenti-shRNA [TL312261D] and [TR30037] packaging kit.