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Product datasheet for TL312841V

GAPDH Human shRNA Lentiviral Particle (Locus ID 2597)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	GAPDH Human shRNA Lentiviral Particle (Locus ID 2597)
Locus ID:	2597
Synonyms:	G3PD; GAPD; HEL-S-162eP
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	GAPDH - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	NM_001256799, NM_001289745, NM_001289746, NM_002046, NM_001357943, NR_152150, NM_002046.1, NM_002046.2, NM_002046.3, NM_002046.4, NM_002046.5, NM_001256799.1, NM_001256799.2, NM_001289745.1, NM_001289746.1, BC009081, BC009081.1, BC001601, BC004109, BC013310, BC020308, BC023632, BC025925, BC026907, BC029340, BC029618, BC083511, BM763361, NM_001289745.3, NM_002046.7, NM_001289746.2, NM_001256799.3
UniProt ID:	P04406
Summary:	This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against E. coli, P. aeruginosa, and C. albicans. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]
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).