

Product datasheet for **TR306304**

HOGA1 Human shRNA Plasmid Kit (Locus ID 112817)

Product data:

Product Type:	shRNA Plasmids
Product Name:	HOGA1 Human shRNA Plasmid Kit (Locus ID 112817)
Locus ID:	112817
Synonyms:	C10orf65; DHDPS2; DHDPSL; HP3; NPL2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	HOGA1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 112817). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC011916 , BC057821 , NM_001134670 , NM_138413 , NM_138413.1 , NM_138413.2 , NM_001134670.1 , BC057821.1 , BC045550 , BC045550.1
UniProt ID:	Q86XE5
Summary:	The authors of PMID:20797690 cloned this gene while searching for genes in a region of chromosome 10 linked to primary hyperoxalurea type III. They noted that even though the encoded protein has been described as a mitochondrial dihydrodipicolinate synthase-like enzyme, it shares little homology with E. coli dihydrodipicolinate synthase (Dhdps), particularly in the putative substrate-binding region. Moreover, neither lysine biosynthesis nor sialic acid metabolism, for which Dhdps is responsible, occurs in vertebrate mitochondria. They propose that this gene encodes mitochondrial 4-hydroxyl-2-oxoglutarate aldolase (EC 4.1.3.16), which catalyzes the final step in the metabolic pathway of hydroxyproline, releasing glyoxylate and pyruvate. This gene is predominantly expressed in the liver and kidney, and mutations in this gene are found in patients with primary hyperoxalurea type III. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Nov 2010]
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).