

Product datasheet for **TR302270**

PRODH2 Human shRNA Plasmid Kit (Locus ID 58510)

Product data:

Product Type:	shRNA Plasmids
Product Name:	PRODH2 Human shRNA Plasmid Kit (Locus ID 58510)
Locus ID:	58510
Synonyms:	HSPOX1; HYPDH
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PRODH2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 58510). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_021232 , NM_021232.1 , BC038853 , BC039710 , BC166629
UniProt ID:	Q9UF12
Summary:	The protein encoded by this gene catalyzes the first step in the catabolism of trans-4-hydroxy-L-proline, an amino acid derivative obtained through food intake and collagen turnover. One of the downstream products of this catabolism is glyoxylate, which in people with disorders of glyoxalate metabolism can lead to an increase in oxalate levels and the formation of calcium-oxalate kidney stones. Therefore, this gene may serve as a therapeutic target against primary hyperoxalurias (PH). This gene is similar to proline dehydrogenase (oxidase) 1, a mitochondrial enzyme that catalyzes the first step in proline catabolism. [provided by RefSeq, Jan 2017]
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).