

## Product datasheet for **TR310193**

### Peroxiredoxin 3 (PRDX3) Human shRNA Plasmid Kit (Locus ID 10935)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Peroxiredoxin 3 (PRDX3) Human shRNA Plasmid Kit (Locus ID 10935)
Locus ID:	10935
Synonyms:	AOP-1; AOP1; HBC189; MER5; PRO1748; prx-III; SP-22
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PRDX3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 10935). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001302272</a> , <a href="#">NM_006793</a> , <a href="#">NM_014098</a> , <a href="#">NR_126102</a> , <a href="#">NR_126103</a> , <a href="#">NR_126105</a> , <a href="#">NR_126106</a> , <a href="#">NM_006793.1</a> , <a href="#">NM_006793.2</a> , <a href="#">NM_006793.4</a> , <a href="#">NM_014098.2</a> , <a href="#">NM_014098.3</a> , <a href="#">NM_001302272.1</a> , <a href="#">BC021691</a> , <a href="#">BC021691.1</a> , <a href="#">BC002685</a> , <a href="#">BC007062</a> , <a href="#">BC008435</a> , <a href="#">BC009601</a> , <a href="#">BC022373</a> , <a href="#">BC059169</a> , <a href="#">BC111397</a> , <a href="#">BM144742</a> , <a href="#">NM_001302272.2</a> , <a href="#">NM_006793.5</a>
UniProt ID:	<a href="#">P30048</a>
Summary:	This gene encodes a mitochondrial protein with antioxidant function. The protein is similar to the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase, and it can rescue bacterial resistance to alkylhydroperoxide in E. coli that lack the C22 subunit. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologs suggest that these genes consist of a family that is responsible for the regulation of cellular proliferation, differentiation and antioxidant functions. This family member can protect cells from oxidative stress, and it can promote cell survival in prostate cancer. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 1, 3, 13 and 22. [provided by RefSeq, Oct 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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).