

Product datasheet for **TR302801**

OPA1 Human shRNA Plasmid Kit (Locus ID 4976)

Product data:

Product Type:	shRNA Plasmids
Product Name:	OPA1 Human shRNA Plasmid Kit (Locus ID 4976)
Locus ID:	4976
Synonyms:	BERHS; largeG; MGM1; MTDPS14; NPG; NTG
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	OPA1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4976). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_015560 , NM_130831 , NM_130832 , NM_130833 , NM_130834 , NM_130835 , NM_130836 , NM_130837 , NM_001354663 , NM_001354664 , NM_015560.1 , NM_015560.2 , NM_130831.1 , NM_130831.2 , NM_130832.1 , NM_130832.2 , NM_130834.1 , NM_130834.2 , NM_130837.1 , NM_130837.2 , NM_130835.1 , NM_130835.2 , NM_130833.1 , NM_130833.2 , NM_130836.1 , NM_130836.2 , BC075805 , BC075805.1 , BC035393 , BC043443 , BC058013 , NM_130837.3 , NM_130832.3 , NM_130834.3 , NM_130833.3 , NM_130836.3
UniProt ID:	O60313
Summary:	The protein encoded by this gene is a nuclear-encoded mitochondrial protein with similarity to dynamin-related GTPases. The encoded protein localizes to the inner mitochondrial membrane and helps regulate mitochondrial stability and energy output. This protein also sequesters cytochrome c. Mutations in this gene have been associated with optic atrophy type 1, which is a dominantly inherited optic neuropathy resulting in progressive loss of visual acuity, leading in many cases to legal blindness. [provided by RefSeq, Aug 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).