

Product datasheet for **TR309190**

SOD2 Human shRNA Plasmid Kit (Locus ID 6648)

Product data:

Product Type:	shRNA Plasmids
Product Name:	SOD2 Human shRNA Plasmid Kit (Locus ID 6648)
Locus ID:	6648
Synonyms:	GClnc1; IPO-B; IPOB; Mn-SOD; MNSOD; MVCD6
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SOD2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 6648). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC016934 , NM_000636 , NM_001024465 , NM_001024466 , NM_001322814 , NM_001322815 , NM_001322816 , NM_001322817 , NM_001322819 , NM_001322820 , NM_000636.1 , NM_000636.2 , NM_000636.3 , NM_001024465.1 , NM_001024465.2 , NM_001024466.1 , NM_001024466.2 , BC016934.1 , BC012423 , BC012423.1 , BC001980 , BC016015 , BC035422 , BC041951 , BM724413 , BM994509 , NM_000636.4 , NM_001024465.3 , NM_001024466.3
UniProt ID:	P04179
Summary:	This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. [provided by RefSeq, Apr 2016]
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).