

Product datasheet for **TR304318**

Glutaredoxin 2 (GLRX2) Human shRNA Plasmid Kit (Locus ID 51022)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Glutaredoxin 2 (GLRX2) Human shRNA Plasmid Kit (Locus ID 51022)
Locus ID:	51022
Synonyms:	CGI-133; GRX2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GLRX2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 51022). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001243399 , NM_001319291 , NM_016066 , NM_197962 , NM_197962.1 , NM_197962.2 , NM_016066.1 , NM_016066.2 , NM_016066.3 , NM_016066.4 , NM_001243399.1 , BC009669 , BC028113 , BM887926 , NM_197962.3
UniProt ID:	Q9NS18
Summary:	The protein encoded by this gene is a member of the glutaredoxin family of proteins, which maintain cellular thiol homeostasis. These proteins are thiol-disulfide oxidoreductases that use a glutathione-binding site and one or two active cysteines in their active site. This gene undergoes alternative splicing to produce multiple isoforms, one of which is ubiquitously expressed and localizes to mitochondria, where it functions in mitochondrial redox homeostasis and is important for the protection against and recovery from oxidative stress. Other isoforms, which have more restrictive expression patterns, show cytosolic and nuclear localization, and are thought to function in cellular differentiation and transformation, possibly with a role in tumor progression. [provided by RefSeq, Aug 2011]
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).