

Product datasheet for **TR313617**

CYB5R3 Human shRNA Plasmid Kit (Locus ID 1727)

Product data:

Product Type:	shRNA Plasmids
Product Name:	CYB5R3 Human shRNA Plasmid Kit (Locus ID 1727)
Locus ID:	1727
Synonyms:	B5R; DIA1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CYB5R3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1727). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_000398 , NM_001129819 , NM_001171660 , NM_001171661 , NM_007326 , NM_000398.2 , NM_000398.3 , NM_000398.4 , NM_000398.5 , NM_000398.6 , NM_007326.1 , NM_007326.2 , NM_007326.3 , NM_007326.4 , NM_001129819.1 , NM_001129819.2 , NM_001171661.1 , NM_001171660.1 , BC004821 , BC004821.1 , BM564146 , NM_000398.7
UniProt ID:	P00387
Summary:	This gene encodes cytochrome b5 reductase, which includes a membrane-bound form in somatic cells (anchored in the endoplasmic reticulum, mitochondrial and other membranes) and a soluble form in erythrocytes. The membrane-bound form exists mainly on the cytoplasmic side of the endoplasmic reticulum and functions in desaturation and elongation of fatty acids, in cholesterol biosynthesis, and in drug metabolism. The erythrocyte form is located in a soluble fraction of circulating erythrocytes and is involved in methemoglobin reduction. The membrane-bound form has both membrane-binding and catalytic domains, while the soluble form has only the catalytic domain. Alternate splicing results in multiple transcript variants. Mutations in this gene cause methemoglobinemias. [provided by RefSeq, Jan 2010]
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).