

Product datasheet for **TR502314**

Tph1 Mouse shRNA Plasmid (Locus ID 21990)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Tph1 Mouse shRNA Plasmid (Locus ID 21990)
Locus ID:	21990
Synonyms:	Tph
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Tph1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 21990). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC072582 , NM_001136084 , NM_001276372 , NM_009414 , NM_009414.1 , NM_009414.2 , NM_009414.3 , NM_001136084.1 , NM_001136084.2 , NM_001276372.1 , BC038864 , BM932391
UniProt ID:	P17532
Summary:	This gene encodes a member of the bipterin-dependent aromatic amino acid hydroxylase family. The encoded protein is one of two tryptophan hydroxylase enzymes that catalyze the first and rate limiting step in the biosynthesis of the hormone and neurotransmitter, serotonin. This gene is expressed in peripheral organs, while tryptophan hydroxylase 2 is expressed in neurons. The encoded protein is involved in the development of hypoxia-induced elevations in pulmonary pressures and pulmonary vascular remodeling, and has also been implicated as a regulator of immune tolerance. Disruption of this gene is associated with cardiac dysfunction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2013]
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).