

## Product datasheet for **TR512973**

### **Ptpn4 Mouse shRNA Plasmid (Locus ID 19258)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Ptpn4 Mouse shRNA Plasmid (Locus ID 19258)
<b>Locus ID:</b>	19258
<b>Synonyms:</b>	hPTP-MEG; Ptn4; PTPMEG; TEP; TEP/mPTPMEG
<b>Vector:</b>	pRS (TR20003)
<b>E. coli Selection:</b>	Ampicillin
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	Ptpn4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 19258). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
<b>RefSeq:</b>	<a href="#">NM_019933</a> , <a href="#">NM_019933.1</a> , <a href="#">NM_019933.2</a> , <a href="#">BC140437</a>
<b>UniProt ID:</b>	<a href="#">Q9WU22</a>
<b>Summary:</b>	Phosphatase that plays a role in immunity, learning, synaptic plasticity or cell homeostasis (PubMed:17953619, PubMed:25825441). Regulates neuronal cell homeostasis by protecting neurons against apoptosis (By similarity). Negatively regulates TLR4-induced interferon beta production by dephosphorylating adapter TICAM2 and inhibiting subsequent TRAM-TRIF interaction (PubMed:25825441). Dephosphorylates also the immunoreceptor tyrosine-based activation motifs/ITAMs of the TCR zeta subunit and thereby negatively regulates TCR-mediated signaling pathway (PubMed:18614237). May act at junctions between the membrane and the cytoskeleton.[UniProtKB/Swiss-Prot Function]
<b>shRNA Design:</b>	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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).