

## Product datasheet for **TR519917**

### Ptprh Mouse shRNA Plasmid (Locus ID 545902)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Ptprh Mouse shRNA Plasmid (Locus ID 545902)
Locus ID:	545902
Synonyms:	R-PTP-H; sap-1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ptprh - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 545902). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_207270</a> , <a href="#">NM_207270.2</a>
UniProt ID:	<a href="#">E9Q0N2</a>
Summary:	Protein phosphatase that may contribute to contact inhibition of cell growth and motility by mediating the dephosphorylation of focal adhesion-associated substrates and thus negatively regulating integrin-promoted signaling processes. Induces apoptotic cell death by at least two distinct mechanisms: inhibition of cell survival signaling mediated by PI 3-kinase, Akt, and ILK and activation of a caspase-dependent proapoptotic pathway. Inhibits the basal activity of LCK and its activation in response to TCR stimulation and TCR-induced activation of MAP kinase and surface expression of CD69. Inhibits TCR-induced tyrosine phosphorylation of LAT and ZAP70. Inhibits both basal activity of DOK1 and its CD2-induced tyrosine phosphorylation. Induces dephosphorylation of BCAR1, focal adhesion kinase and SRC. Reduces migratory activity of Jurkat cells (By similarity). Reduces tyrosine phosphorylation of CEACAM20 and thereby contributes to suppress the intestinal immune response (PubMed:26195794).[UniProtKB/Swiss-Prot Function]
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 <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).