

## Product datasheet for **TR302196**

### PTP epsilon (PTPRE) Human shRNA Plasmid Kit (Locus ID 5791)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	PTP epsilon (PTPRE) Human shRNA Plasmid Kit (Locus ID 5791)
Locus ID:	5791
Synonyms:	HPTPE; PTPE; R-PTP-EPSILON
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PTPRE - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5791). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001316676</a> , <a href="#">NM_001316677</a> , <a href="#">NM_006504</a> , <a href="#">NM_130435</a> , <a href="#">NM_001323354</a> , <a href="#">NM_001323355</a> , <a href="#">NM_001323356</a> , <a href="#">NM_001323357</a> , <a href="#">NM_006504.1</a> , <a href="#">NM_006504.2</a> , <a href="#">NM_006504.3</a> , <a href="#">NM_006504.4</a> , <a href="#">NM_006504.5</a> , <a href="#">NM_130435.1</a> , <a href="#">NM_130435.2</a> , <a href="#">NM_130435.3</a> , <a href="#">NM_130435.4</a> , <a href="#">BC050062</a> , <a href="#">BC050062.1</a> , <a href="#">BC031078</a> , <a href="#">BC071573</a> , <a href="#">BM970048</a> , <a href="#">NM_130435.5</a> , <a href="#">NM_006504.6</a>
UniProt ID:	<a href="#">P23469</a>
Summary:	The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. Several alternatively spliced transcript variants of this gene have been reported, at least two of which encode a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokine-induced SATA signaling, as well as the activation of voltage-gated K <sup>+</sup> channels. [provided by RefSeq, Oct 2015]



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- 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](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- 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).