

## Product datasheet for **TG302202**

### PTPN13 Human shRNA Plasmid Kit (Locus ID 5783)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	PTPN13 Human shRNA Plasmid Kit (Locus ID 5783)
Locus ID:	5783
Synonyms:	FAP-1; hPTP1E; PNP1; PTP-BAS; PTP-BL; PTP1E; PTPL1; PTPLE
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PTPN13 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5783). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<a href="#">NM_006264</a> , <a href="#">NM_080683</a> , <a href="#">NM_080684</a> , <a href="#">NM_080685</a> , <a href="#">NM_080683.1</a> , <a href="#">NM_080683.2</a> , <a href="#">NM_080684.1</a> , <a href="#">NM_080684.2</a> , <a href="#">NM_080685.1</a> , <a href="#">NM_080685.2</a> , <a href="#">NM_006264.1</a> , <a href="#">NM_006264.2</a> , <a href="#">BC039610</a> , <a href="#">BC139915</a> , <a href="#">BC140777</a> , <a href="#">BC144520</a> , <a href="#">NM_080684.3</a> , <a href="#">NM_080683.3</a>
UniProt ID:	<a href="#">Q12923</a>
Summary:	The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large intracellular protein. It has a catalytic PTP domain at its C-terminus and two major structural domains: a region with five PDZ domains and a FERM domain that binds to plasma membrane and cytoskeletal elements. This PTP was found to interact with, and dephosphorylate, Fas receptor and IκappaBα through the PDZ domains. This suggests it has a role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathways. Four alternatively spliced transcript variants, which encode distinct proteins, have been reported. [provided by RefSeq, Oct 2008]
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> .



**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).