OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TL310067V

PTP1B (PTPN1) Human shRNA Lentiviral Particle (Locus ID 5770)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	PTP1B (PTPN1) Human shRNA Lentiviral Particle (Locus ID 5770)
Locus ID:	5770
Synonyms:	PTP1B
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	PTPN1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10^7 TU/ml.
RefSeq:	NM_001278618, NM_002827, NM_002827.1, NM_002827.2, NM_002827.3, NM_001278618.1, BC015660, BC015660.2, BC018164, NM_002827.4
UniProt ID:	P18031
Summary:	The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotryosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 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.

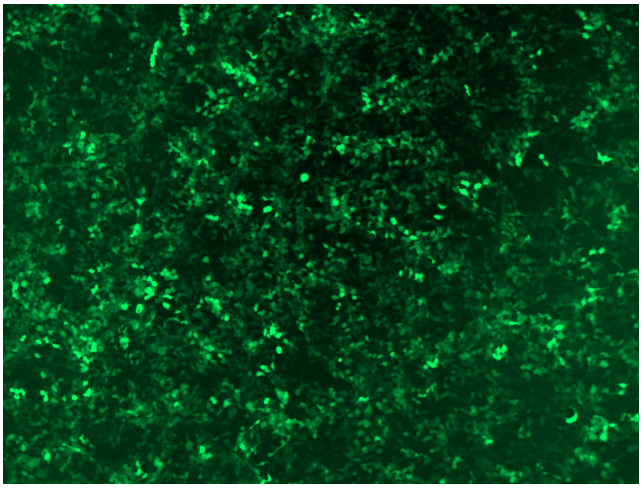
View online »

Performance Guaranteed:

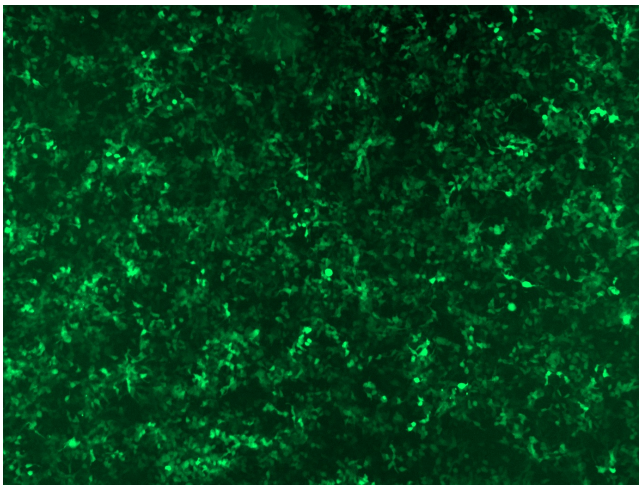
OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. 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).

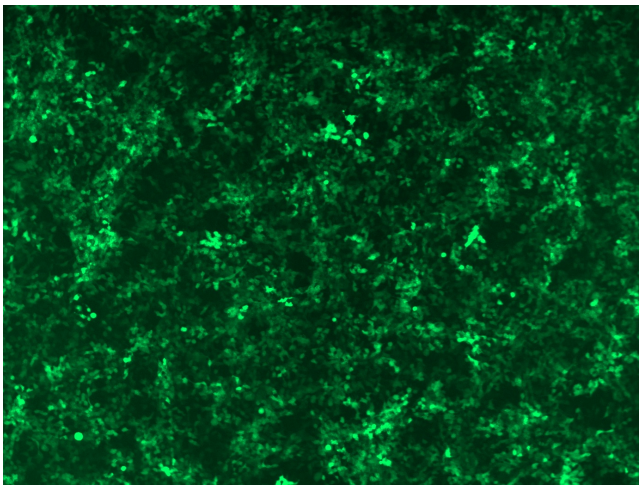
Product images:



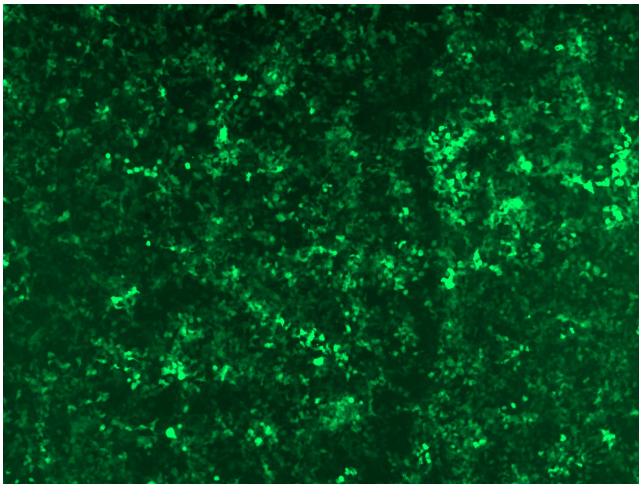
GFP signal was observed under microscope at 48 hours after transduction of TL310067A virus into HEK293 cells. TL310067A virus was prepared using lenti-shRNA TL310067A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL310067B virus into HEK293 cells. TL310067B virus was prepared using lenti-shRNA TL310067B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310067C] virus into HEK293 cells. [TL310067C] virus was prepared using lenti-shRNA [TL310067C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310067D] virus into HEK293 cells. [TL310067D] virus was prepared using lenti-shRNA [TL310067D] and [TR30037] packaging kit.