

## **Product datasheet for TL310057**

#### OriGene Technologies, Inc.

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## SHP1 (PTPN6) Human shRNA Plasmid Kit (Locus ID 5777)

#### **Product data:**

**Product Type:** shRNA Plasmids

Product Name: SHP1 (PTPN6) Human shRNA Plasmid Kit (Locus ID 5777)

Locus ID: 5777

Synonyms: HCP; HCPH; HPTP1C; PTP-1C; SH-PTP1; SHP-1; SHP-1L; SHP1

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** PTPN6 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5777).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 002831, NM 080548, NM 080549, NM 080548.1, NM 080548.2, NM 080548.3,

NM 080548.4, NM 002831.1, NM 002831.4, NM 002831.5, NM 080549.1, NM 080549.2,

NM 080549.3, BC002523, BC002523.2, BC007667, BM006699, BM742181

UniProt ID: P29350

**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. N-terminal part of this PTP contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of this PTP with its substrates. This PTP is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been

important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been shown to interact with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling. Multiple alternatively spliced variants of this gene, which

encode distinct isoforms, have been reported. [provided by RefSeq, Jul 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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



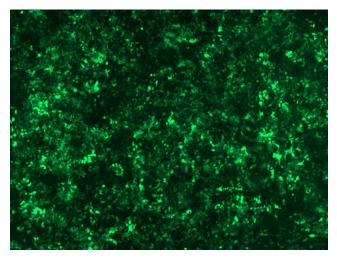


### Performance Guaranteed:

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.

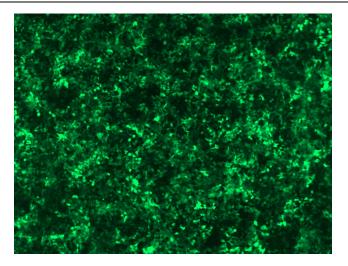
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

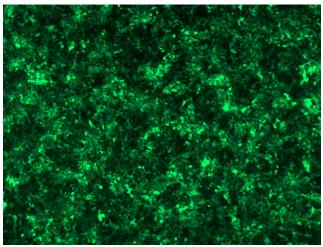


GFP signal was observed under microscope at 48 hours after transduction of TL310057A virus into HEK293 cells. TL310057A virus was prepared using lenti-shRNA TL310057A and [TR30037] packaging kit.

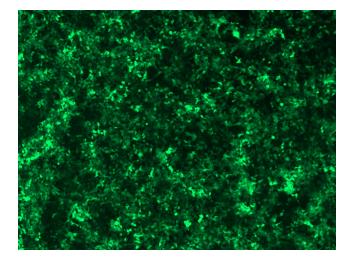




GFP signal was observed under microscope at 48 hours after transduction of TL310057B virus into HEK293 cells. TL310057B virus was prepared using lenti-shRNA TL310057B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310057C] virus into HEK293 cells. [TL310057C] virus was prepared using lenti-shRNA [TL310057C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL310057D] virus into HEK293 cells. [TL310057D] virus was prepared using lenti-shRNA [TL310057D] and [TR30037] packaging kit.