

#### OriGene Technologies, Inc.

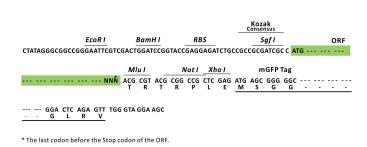
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# Product datasheet for RC213896L4

### SHP1 (PTPN6) (NM\_002831) Human Tagged Lenti ORF Clone

### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SHP1 (PTPN6) (NM_002831) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	SHP1
Synonyms:	HCP; HCPH; HPTP1C; PTP-1C; SH-PTP1; SHP-1; SHP-1L; SHP1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC213896).
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	Sgf I         ORF         Mlu I            GCG ATC GC[C         ATG //         NNN         ACG CGT



ACCN: ORF Size: NM\_002831 1785 bp



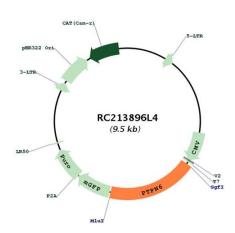
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SHP1 (PTPN6) (NM_002831) Human Tagged Lenti ORF Clone – RC213896L4	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
RefSeq:	<u>NM 002831.3</u>
RefSeq Size:	2253 bp
RefSeq ORF:	1788 bp
Locus ID:	5777
UniProt ID:	<u>P29350</u>
Cytogenetics:	12p13.31
Domains:	Y_phosphatase, SH2, PTPc_motif
Protein Families:	Druggable Genome, Phosphatase, Stem cell - Pluripotency
Protein Pathways:	Adherens junction, B cell receptor signaling pathway, Jak-STAT signaling pathway, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway
MW:	67.4 kDa
Gene 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 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]

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## **Product images:**



bp 10000 8000 6000 5000 3500 2500 -2500 -750 -500 -250 Circular map for RC213896L4

Double digestion of RC213896L4 using Sgfl and Mlul

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