

## Product datasheet for **RG213476**

### **PTPN18 (NM\_014369) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTPN18 (NM_014369) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPN18
Synonyms:	BDP1; PTP-HSCF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG213476 representing NM\_014369  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGAGCCGACGCTGGACTCGGCGGGAGCTTCTGAGCGGCTGGAAGCGGGGGCGCCGGGAGGGG  
 CAGTCCTCGCCGCGAGTTCAGCGACATCCAGGCTGCTCGGCCCTGGAAGGCTGACGGCGTGTGCTC  
 CACCGTGGCCGGCAGTCCGCCAGAGAACGTGAGGAAGAACCCTACAAAGACGTGCTGCCTTATGATCAG  
 ACGCGAGTAATCCTCTCCCTGCTCCAGGAAGAGGGACACAGCGACTACATTAATGGCAACTTCATCCGGG  
 GCGTGGATGGAAGCCTGGCTACATTGCCACGCAAGGACCCTTGCTCACACCCTGCTAGACTTCTGGAG  
 ACTGGTCTGGGAGTTGGGGTCAAGGTGATCCTGATGGCCTGTCGAGAGATAGAGAATGGGCGAAAAGG  
 TGTGAGCGGTACTGGGCCAGGAGCAGGAGCCACTGCAGACTGGGCTTTTCTGCATCACTCTGATAAAGG  
 AGAAGTGGCTGAATGAGGACATCATGCTCAGGACCCTCAAGGTACATTCAGAAGGAGTCCCGTTCTGT  
 GTACCAGTACAGTATATGTCCTGGCCAGACCGTGGGGTCCCCAGCAGTCTGACCACATGCTCGCCATG  
 GTGGAGGAAGCCCGTCCGCTCCAGGGATCTGGCCCTGAACCCCTCTGTGTCCACTGCAGTGGGGTTGTG  
 GGCAACAGGCGTCTGTGCACCGTGGATTATGTGAGGCAGCTGCTCCTGACCCAGATGATCCCACCTGA  
 CTTAGTCTCTTTGATGTGGTCTTAAGATGAGGAAGCAGCGGCCTGCGGCCGTGCAGACAGAGGAGCAG  
 TACAGGTTCTGTACCACACGGTGGCTCAGATGTTCTGCTCCACACTCCAGAATGCCAGCCCCACTACC  
 AGAACATCAAAGAGAATTGTGCCCACTCTACGACGATGCCCTTCTCCTCCGGACTCCCCAGGCATTCT  
 CGCCATACCCCGCCACCAGGAGGGTCTCAGGAGCATCTCTGTGCCGGGTCCCCGGGCCACGCCATG  
 GCTGACACCTACGCGGTGGTGCAGAAGCGGGGCTCCAGCGGGCGCCGGGAGTGGGACGACAGCGGGGA  
 CGGGGACGGGGGCGCCAGCGCGGAGGAGGCGCCGCTCTACAGCAAGGTGACGCCGCGCCAGCGACC  
 CGGGGCGCACCGGAGGACGCGAGGGGGACGCTGCCTGGCCGCGTTCTGCTGACCAAAGTCTGCCGGA  
 TCTGGCGCTACGAGGACGTGGCGGGTGGAGCTCAGACCGGTGGGCTAGGTTTCAACCTGCGCATTGGGA  
 GGCCGAAGGGTCCCCGGGACCCGCTGCTGAGTGGACCCGGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG213476 representing NM\_014369  
 Red=Cloning site Green=Tags(s)

MSRSLDSARSFLERLEARGGREGAVLAGEFSDIQACSAAWKADGVCSTVAGSRPENVRKNRYKDVLPYDQ  
 TRVILSLLQEEGHSYINGNFIRGVDGSLAYIATQGPHLLDFWRLVWEFGVKVILMACREIENGRKR  
 CERYWAQEQEPLQTGLFCITLIEKWLNEDIMLRLLKVTQKESRSVYQLQYMSWPDGVPSSPDHMLAM  
 VEEARRLQSGPEPLCVHCSAGCGRTGVLCTVDYVRQLLLTQMIPPDFSLFDVVLKMRKQRPAAVQTEEQ  
 YRFLYHTVAQMF CSTLQNASPHYQNIKENCAPLYDDALFLRTPQALLAIPRPPGGVLRISISVPGSPGHAM  
 ADTYAVVQKRGAPAGAGSGTQTGTGTGARS AEEAPLYSKVTPRAQRPGAHAEDARGTLPGRVPADQSPAG  
 SGAYEDVAGGAQTGGLGFNLRIGRPKGPRDPPAEWTRV

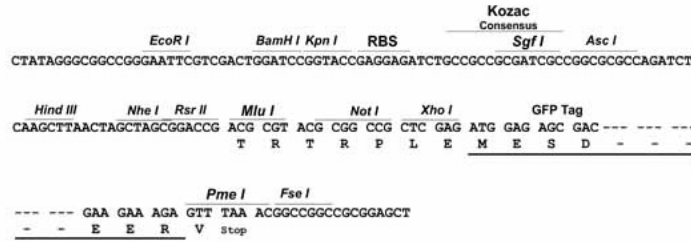
TRTRPLE - GFP Tag - V

**Restriction Sites:**

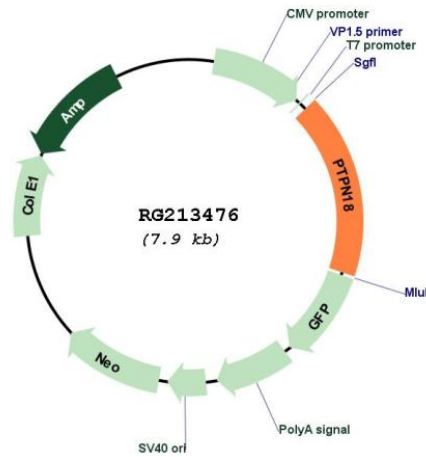
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_014369

ORF Size: 1380 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. 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>
<b>RefSeq:</b>	<a href="#">NM_014369.4</a>
<b>RefSeq Size:</b>	3686 bp
<b>RefSeq ORF:</b>	1383 bp
<b>Locus ID:</b>	26469
<b>UniProt ID:</b>	<a href="#">Q99952</a>
<b>Cytogenetics:</b>	2q21.1
<b>Domains:</b>	Y_phosphatase, PTPc_motif
<b>Protein Families:</b>	Druggable Genome, Phosphatase

**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, the mitotic cycle, and oncogenic transformation. This PTP contains a PEST motif, which often serves as a protein-protein interaction domain, and may be related to protein intracellular half-life. This protein can differentially dephosphorylate autophosphorylated tyrosine kinases that are overexpressed in tumor tissues, and it appears to regulate HER2, a member of the epidermal growth factor receptor family of receptor tyrosine kinases. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2008]