

## Product datasheet for **RG226736**

### **PTPH1 (PTPN3) (NM\_001145369) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTPH1 (PTPN3) (NM_001145369) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPN3
Synonyms:	PTP-H1; PTPH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG226736 representing NM\_001145369  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACCTCCCGTTACGTGCGTTGGGTGGAAGAATTAATAATATACGCACCTCGGAGTTACCCAAGAGA  
 AAACCTCGATCAGAAGTCATTTGCAGCATCCACTTTTTAGATGGCGTGGTACAGACCTTTAAAGTTACTAA  
 ACAAGACACTGGCCAGGTTCTTCTGGATATGGTGCAACAACACCTGGGTGTGACTGAAAAGGAATATTTT  
 GGTTTACAGCATGATGACGACTCCGTGGACTCTCCTAGATGGCTGGAAGCAAGCAAAGCCATCAGGAAGC  
 AGTTAAAAGGAGGTTTCCCCTGTACCCTGCATTTTCGAGTAAGATTTTTTATACCTGATCCCAACACACT  
 GCAGCAAGAACAACAGGCACCTGTATTTCTTACAACCTGAAGATGGATATTTGCGAAGGAAGGTTAACC  
 TGCCCTCTTAACCTCAGCAGTGGTCTAGCGTCTATGCCGTACAATCTCATTGGAGACTATAATTCTT  
 CCATACATCATCCAGGCTATCTTCCGATAGTCACCTTTATACCCGATCAAAATGAGGACTTTTTAACAAA  
 AGTCGAATCTCTGCATGAGCAGCACAGTGGGCTAAAACAATCAGAAGCAGAATCTGCTATATCAACATA  
 GCGCGGACCCCTCGACTTCTATGGAGTAGAAGTGCACAGTGGTAGGGATCTGCACAATTTAGACCTAATGA  
 TTGGAATTGCTTCCGCGGGTGTGCTGTGTACCGAAAATACATTTGCACAAGTTTCTATCCTTGGGTGAA  
 CATTCTCAAAATTTCTTTCAAAAGGAAAAGTTTTCATACATCAGCGACAGAAACAGGCTGAATCCAGG  
 GAACATATTGGGCCCTTCAACATGCTGAATTACCGATCTTGCAAAAACCTTGCGAAATCTGTGTTGAGC  
 ACCATACGTTCTTTCAGGCAAAGAAGCTACTACCTCAGGAAAAGAATGTTCTGTCTCAGTACTGGACTAT  
 GGGCTCTCGAACACCAAAAAGTCGGTAAATAACCAATATTGCAAAAAGGTGATTGGCGGGATGGTGTGG  
 AACCCAGCCATGCGGAGATCCTTATCAGTGGAGCACTTAGAAACCAAGAGTCTGCCTTCTCGTCCCCCTC  
 CCATTACTCCCAACTGGCGAAGTCTCGGCTCCGGCAGAAATCCGAAAGCCACGCCACTTCTGCAGTA  
 TAACCTTGCAAAATGAAATGACCTACATCACGGAACGGAAGATGATTTTTACACGTACAAGGGCTCTCTG  
 GCCCTCAAGACAGGATTCTGAAGTTTCTCAGAACCGAAGCCCGCACCAAGAGAGTTTATCCGAGAACA  
 ATCCGGCACAAAGCTACCTGACCAGAAGTCATCCAGTTCTGTGTCTCCATCTTCAAATGCTCCAGGCTC  
 CTGCTCACCTGACGGCGTTGATCAGCAGCTCTTAGATGACTTCCACAGGGTGACCAAAGGGGCTCCACC  
 GAGGACGCCAGCCAGTACTACTGTGACAAGAATGATAATGGTGACAGCTACTTAGTCTTGATCCGTATCA  
 CACCAGATGAAGATGGAAAATTTGGATTTAATCTTAAGGGAGGAGTGGATCAAAGATGCCTCTTGTTGGT  
 ATCAAGGATAAACCCAGAGTCACCTGCGGACACCTGCATTCTAAGCTGAACGAAGGGGATCAAATCGTG  
 TTAATCAATGGCCGGGACATCTCAGAACACACGCATGACCAAGTGGTGTGTTTCATCAAAGCCAGCCGGG  
 AGTCCCCTCACGGGAGCTGGCCCTGGTGTATCAGGAGGAGAGCTGTCCGCTCATTGCTGACTTCAAGTC  
 TGAAGATGAACCTGAACAGCTTTTCCCCGAAGCCATTTCCCCATGTGTCCGGAGGGTGGGGACACTTTG  
 GAGGGATCCATGGCACAGCTAAAGAAGGGCCTCGAAAAGCGGGACGGTGTGATCCAGTTTGGCAACTCT  
 ACAGAAAAAGCCAGGTTTGGCCATCACGTTTGCAAAAGCTGCCTCAAAATTTGGACAAAAACCGATATA  
 AGATGTGCTGCCTTATGACACCACCCGGGTATTATTGCAGGAAATGAAGATTATATTAATGCAAGTTAC  
 GTGAACATGGAAATTCCTGCTGCTAACCTTGTGAACAAGTACATCGCCACTCAGGGGCCCTGCCGATA  
 CCTGTGCACAGTTTTGGCAGTTGTCTGGGATCAGAAGTTGTCACTCATTGTGATGTTGACGACTCTCAC  
 AGAACGAGGGCGGACCAAATGTCACCACTACTGGCCAGATCCCCCGACGTCATGAACCAGGGCGGCTTT  
 CACATCCAGTGTGATCAGAGGACTGCACCATCGCCTATGTGTCCGAGAAATGCTGGTACAAACACCC  
 AGACCGGGGAAGAACACACAGTGACACATCTCCAGTACGTGCGATGGCCTGACCAGGTGTGCCGATGA  
 CTCTCCGACTTTCTGGAATTTGTAACACTATGTGAGGTCTCTGAGAGTGGACAGCGAGCCCGTCTAGTT  
 CACTGCAGTGTGGAATAGGTGCAACCGGTGTGTTGGTCACTATGGAAACAGCCATGTGCCTAACTGAGA  
 GGAACCTGCCATTTACCCACTGGATATTGTCCGAAAAATGCGAGACCAGCGCCATGATGGTGCAGAC  
 ATCAAGCCAGTACAAGTTTGTGTGAAGCGATTCTTCGTGTGTATGAAGAAGGTTTAGTCCAAATGCTG  
 GATCCTAGT

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG226736 representing NM\_001145369  
 Red=Cloning site Green=Tags(s)

MTSRLRALGGRINNIRTSELPKEKTRSEVICSIHFLDGVVQTFKVTQKQDTGQVLLDMVHNHLGVTEKEYF  
 GLQHDDSDVSPRWLEASKAIRKQLKGGFPCTLHFRVRFIPDPNTLQQEQTRHLYFLQLKMDICEGRLT  
 CPLNSAVVLYASYAVQSHFGDYNSIHHPGYLSDSHFIPDQNEFLTKVESLHEQHSGLKQSEAESCYNINI  
 ARTLDFYGVLEHSGRDLHNLDMIGIASAGVAVYRKYICTSFYPWVNIKLSFKRKKFFIHQRQKQAESR  
 EHIVAFNMLNYRSCKNLWKSCEVHHTFFQAKLLPQEKVLSQYWTMGSRNKKSNNQYCKKVIIGMVW  
 NPAMRRSLSVEHLETKSLPSRSPPIPTNWRSPRLRHEIRKPRHSSADNLANEMTYITETEDVFYTYKGS  
 APQSDSEVSNRSPHQESLSENNPAQSYLTQKSSSSVSPSSNAPGSCSPDGVDQQLLDDFHRVTKGGST  
 EDASQYYCDKNDNGSYLVLIRITPDEDGKFGFNLKGGVDQKMPVVSRINPESPADTCIPKLNEDQIV  
 LINGRDISEHTDQVVMFIKASRESHSRELALVIRRRVRSFADFSEDELNQLFPEAIFPMCPEGGDTL  
 EGSMALKKGLESGTVLIQFEQLYRKKPLAITFAKLPQNLKKNRYKDVLPYDTRVLLQGNEDYINASY  
 VNMEIPAANLVNKYIATQGPLPHTCAQFWQVVDQKLSLIVMLTTLTERGRTKCHQYWPDPDMVNHGGF  
 HIQCQSEDCTIAYVSREMLVTNTQTGEEHTVTHLQYVAWPDHGVPPDSSDFLEFVNYVRSRVDSEPVLV  
 HCSAGIGRTGVLVTMETAMCLTERNLPIYPLDIVRKMRDQRAMVQTSSQYKFVCEAILRVYEEGLVQML  
 DPS

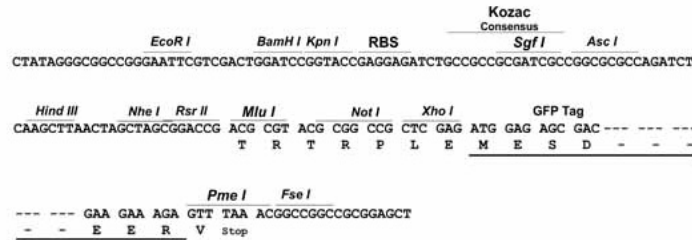
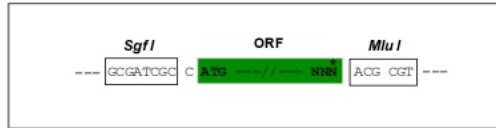
TRTRPLE – GFP Tag – V

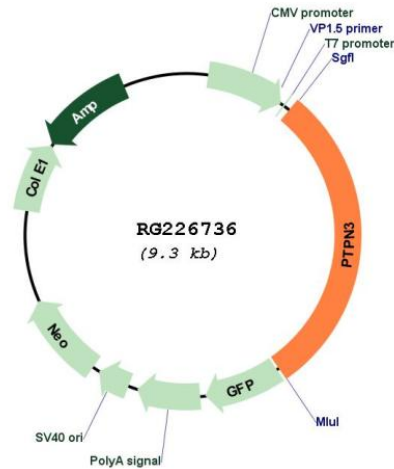
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_001145369

**ORF Size:** 2742 bp

**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. [More info](#)

**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:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_001145369.1](#), [NP\\_001138841.1](#)

**RefSeq Size:** 8783 bp

**RefSeq ORF:** 2349 bp

**Locus ID:** 5774

**UniProt ID:** [P26045](#)

**Cytogenetics:** 9q31.3

**Protein Families:** 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, mitotic cycle, and oncogenic transformation. This protein contains a C-terminal PTP domain and an N-terminal domain homologous to the band 4.1 superfamily of cytoskeletal-associated proteins. P97, a cell cycle regulator involved in a variety of membrane related functions, has been shown to be a substrate of this PTP. This PTP was also found to interact with, and be regulated by adaptor protein 14-3-3 beta. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2009]