

Product datasheet for **RG226972**

PTPH1 (PTPN3) (NM_001145372) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPH1 (PTPN3) (NM_001145372) 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:

>RG226972 representing NM_001145372
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCTCCCGTTACGTGCGTTGGGTGGAAGAATTAATAATATACGCACCTCGGAGTTACCCAAAGAGA
 AAACCTCGATCAGAAGTCATTTGCAGCATCCACTTTTTAGATGGCGTGGTACAGACCTTTAAAGTTACTAA
 ACAAGACACTGGCCAGGTTCTTCTGGATATGGTGACACAACCACCTGGGTGTGACTGAAAAGGAATATTTT
 GGTTTACAGCATGATGACGACTCCGTGGACTCTCCTAGATGGCTGGAAGCAAGCAAAGCCATCAGGAAGC
 AGTTAAAAGGAGGTTTCCCTGTACCCTGCATTTTCGAGTAAGATTTTTTATACCTGATCCCAACACACT
 GCAGCAAGAACAACCAGGCCTGTATTTCTTACAACCTGAAGATGGATATTTGCGAAGGAAGGTTAACC
 TGCCCTCTTAACCTCAGCAGTGGTCTAGCGTCTATGCCGTACAATCTCATTTTGGAGACTATAATTCTT
 CCATACATCATCCAGGCTATCTTCCGATAGTCACCTTTATACCCGATCAAAATGAGGACTTTTTAACAAA
 AGTCGAATCTCTGCATGAGCAGCACAGTGGGCTAAAACAATCAGAAGCAGAAATCTGCTATATCAACATA
 GCGCGGACCCCTCGACTTCTATGGAGTAGAACTGCACAGTGGTAGGGATCTGCACAATTTAGACCTAATGA
 TTGGAATTGCTTCCGCGGGTGTGCTGTGTACCGAAAATACATTTGCACAAGTTTCTATCCTTGGGTGAA
 CATTCTCAAAATTTCTTTCAAAAGGAAAAAGTTTTCATACATCAGCGACAGAAACAGGCTGAATCCAGG
 GAACATATTGGGCCCTTCAACATGCTGAATTACCGATCTTGCAAAAACCTGTGGAATCTGTGTTGAGC
 ACCATACGTTCTTTCAGGCAAAGAAGCTACTACCTCAGGAAAAGAATGTCTGTCTCAGTACTGGACTAT
 GGGCTCTCGGAACACCAAAAAGCGAAGTCTCGGCTCCGGCACGAAATCCGAAAGCCACGCCACTCTTCT
 GCAGATAACCTTGCAAAATGAAATGACCTACATCACGGAACCGAAGATGATTTTTACACGTACAAGGGCT
 CTCTGGCCCTCAAGACAGCGATTCTGAAGTTTCTCAGAACCAGCCCGCACCAAGAGTTTTATCCGA
 GAACAATCCGGCACAAAGCTACCTGACCCAGAAGTCATCCAGTTCTGTGTCTCCATCTTCAAATGCTCCA
 GGCTCCTGCTCACCTGACGGCGTTGATCAGCAGCTCTTAGATGACTTCCACAGGGTGACCAAGGGGGCT
 CCACCGAGGACGCCAGCCAGTACTACTGTGACAAGAATGATAATGGTGACAGCTACTTAGTCTTGATCCG
 TATCACACCAGATGAAGATGGAAAATTTGGATTTAATCTTAAGGGAGGAGTGGATCAAAAGATGCCTCTT
 GTGGTATCAAGGATAAACCCAGAGTCACCTGCGGACACCTGCATTCTAAGCTGAACGAAGGGGATCAAA
 TCGTGTTAATCAATGGCCGGGACATCTCAGAACACACGCATGACCAAGTGGTGTGTTTCAAAAGCCAG
 CCGGGAGTCCCCTCACGGGAGCTGGCCCTGGTATCAGGAGGAGAGCTGTCCGCTCATTGCTGACTTC
 AAGTCTGAAGATGAAGTGAACAGCTTTTCCCGAAGCCATTTTCCCATGTGTCCGGAGGGTGGGGACA
 CTTTGGAGGGATCCATGGCACAGCTAAAGAAGGGCCTCGAAAGCGGGACGGTGTGATCCAGTTTGAAGCA
 ACTCTACAGAAAAAGCCAGGTTTGGCCATCACGTTTGCAAAAGCTGCCTCAAAATTTGGACAAAAACCGA
 TATAAAGATGTGCTGCCTTATGACACCACCCGGGTATTATTGCAGGGAAATGAAGATTATATTAATGCAA
 GTTACGTGAACATGGAAATTCCTGCTGTAACCTTGTGAACAAGTACATCGCCACTCAGGGGCCCTGCC
 GCATACCTGTGCACAGTTTTGGCAGTTGTCTGGGATCAGAAGTGTCACTCATTGTGATGTTGACGACT
 CTCACAGAACGAGGGCGGACCAATGTCACCAGTACTGGCCAGATCCCCCGACGTCATGAACCACGGCG
 GCTTTTACATCCAGTGTGAGTGTGAGGACTGCACCATCGCCTATGTGTCCCGAGAAATGCTGGTCAAAA
 CACCCAGACCGGGGAAGAACAACACACAGTGACACATCTCCAGTACGTGCGATGGCCTGACCAGGTGTGCC
 GATGACTCCTCCGACTTTCTGGAATTTGTAACCTATGTGAGGTCTCTGAGAGTGGACAGCGAGCCGCTCC
 TAGTTCACTGCAGTGTGGAATAGTTCGAACCGGTGTGTTGGTCACTATGGAAACAGCCATGTGCCATAAC
 TGAGAGGAACCTGCCATTTACCCACTGGATATTGTCCGAAAAATGCGAGACCAGCGCCATGATGGTG
 CAGACATCAAGCCAGTACAAGTTTGTGTGTGAAGCGATTCTTCGTGTGTATGAAGAAGGTTTAGTCCAAA
 TGCTGGATCCTAGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG226972 representing NM_001145372
 Red=Cloning site Green=Tags(s)

MTSRLRALGGRINNIRTSELPKEKTRSEVICSIHFLDGVVQTFKVTQKQDTGQVLLDMVHNHLGVTEKEYF
 GLQHDDSDVSPRWLEASKAIRKQLKGGFPCTLHFRVRFIPDPNTLQQEQTRHLYFLQLKMDICEGRLT
 CPLNSAVVLYASYAVQSHFGDYNSIIHPGYLSDSHFIPDQNEFDLTKVESLHEQHSGLKQSEAESYINI
 ARTLDFYGVVELHSGRDLHNLDMIGIASAGVAVYRKYICTSFYPWVNILKISFKRKKFFIHQRQKQAESR
 EHIVAFNMLNYRSCKNLWKSCVEHHTFFQAKLLLPQEKVLSQYWTMGSRNKKRSPRLRHEIRKPRHSS
 ADNLANEMTYITETEDVFYTYKGLAPQSDSEVSQNRSPHQESLSENNPAQSYLTQKSSSSVSPSSNAP
 GSCSPDGVQQLLDDFHRVTKGGSTEDASQYYCDKNDNGDLYLIRITPDEDGKFGFNLKGGVDQKMP
 VVSRINPEPADTCIPKLNEGQIVLINGRDISEHTDQVVMFIKASRESHSRELALVIRRAVRSFADF
 KSEDELNQLFPEAIFPMCPEGGDTLEGSMAQLKKGLESGTVLIQFEQLYRKKPGLAITFAKLPQNLDKNR
 YKDVLPHYDTRVLLQGNEDYINASYVNMEIPAANLVNKYIATQGPLPHTCAQFWQVVDQKLSLIVMLTT
 LTERGRTKCHQYWPDPDVMNHGGFHIQCQSEDCIAYVSREMLVTNTQTGEEHTVTHLQYVAVPDHGVP
 DDSSDFLEFVNYVRSRLVDSEPLVHCSAGIGRTGVLVTMETAMCLTERNLPIYPLDIVRKMQRDQAMMV
 QTSSQYKFVCEAILRVYEEGLVQMLDPS

TRTRPLE - GFP Tag - V

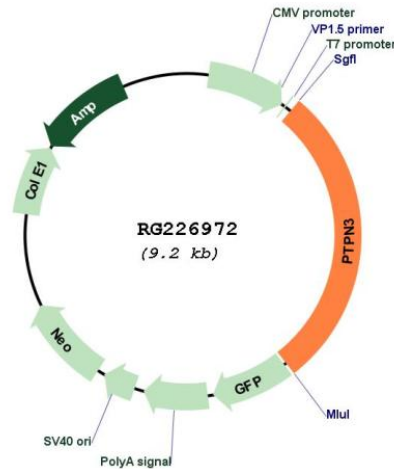
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001145372

ORF Size: 2607 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_001145372.1](#), [NP_001138844.1](#)

RefSeq Size: 6082 bp

RefSeq ORF: 1746 bp

Locus ID: 5774

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]