

Product datasheet for **RG217371**

PTPN5 (NM_032781) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN5 (NM_032781) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPN5
Synonyms:	PTPSTEP; STEP; STEP61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG217371 representing NM_032781
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATTATGAGGAGCCAGGAGTGAGAGAGAGAACCACGCTGCTGATGACTCCGAGGGAGGGCCCTGG
 ACATGTGCTGCAGTGAGAGGCTACCGGGTCTCCCCAGCCGATAGTGATGGAGGCACTGGACGAGGCTGA
 AGGGCTCCAGGACTCACAGAGAGAGATGCCGCCACCCCTCCTCCCTCGCCGCCCTCAGATCCAGCTCAG
 AAGCCACCACCTCGAGGCGCTGGGAGCCACTCCCTCACTGTCAGGAGCAGCCTGTGCCTGTTTCGCTGCCT
 CACAGTTCCTGCTGCTGTGGGGTCTCTGGTTCAGCGGTTATGGCCACATCTGGTCACAGAACGCCAC
 AAACCTCGTCTCCTTTTGTGACGCTCCTGAAACAGCTGGAACCCACGGCCTGGCTTGACTCTGGGACG
 TGGGGAGTCCCCAGTCTGCTGCTGGTCTTTCTGTCCGTGGGCCTGGTCTCGTTACCACCCTGGTGTGGC
 ACCTCCTGAGGACACCCAGAGCCACCCACCCACTGCCCTGAGGACAGGCGCCAGTCACTGAGCCG
 CCAGCCCTCCTTACCTACTCAGAGTGGATGGAGGAGAAGATCGAGGATGACTTCTGGACCTCGACCCG
 GTGCCCGAGACTCCTGTGTTGATTGTGTGATGGACATCAAGCCTGAGGCTGACCCACCTCACTACCCG
 TCAAGTCCATGGGTCTGCAGGAGAGGAGGGTTCCAATGTCTCCCTGACCTGGACATGTGCACTCCGGG
 CTGCAACGAGGAGGGCTTTGGCTATCTCATGTCCACAGTGGAGGAGTCCGCCCGGAGTACCTGCTCAGC
 GCCTCCCGTGTCTCCAAGCAGAAGAGCTTCATGAAAAGGCCCTGGACCTTTCTGCTGCAGGCGGAAT
 TCTTTGAAATCCCATGAACTTTGTGGATCCGAAAAGAGTACGACATCCCTGGGCTGGTGCAGGGAACCG
 GTACAAAACATACTTCCCAACCCTCACAGCAGAGTGTGTCTGACCTCACCAGACCCTGACGACCCTCTG
 AGTTCCTACATCAATGCCAACTACATCCGGGCTATGGTGGGAGGAGAAGGTGTACATCGCCACTCAGG
 GACCCATCGTCAGCACGGTCGCGGACTTCTGGCGCATGGTGTGGCAGGAGCACAGCCCATCATTGTGAT
 GATCACCAACATCGAGGAGATGAACGAGAAATGCACCGAGTATTGGCCGGAGGAGCAGGTGGCGTACGAC
 GGTGTTGAGATCACTGTGCAGAAAGTCATTACACGAGGATTACCGGCTGCGACTCATCTCCCTCAAGA
 GTGGGACTGAGGAGCGAGGCCTGAAGCATTACTGGTTCACATCCTGGCCCGACCAGAAGACCCAGACCG
 GGCCCCCCTACTCTGCACCTGGTGCAGGAGGTGGAGGAGGAGCCAGCCAGGAGGGGCCCTACTGTGCC
 CCCATCATCGTCCACTGCAGTGCAGGGATTGGGAGGACCGGCTGCTTATTGCCACCAGCATCTGCTGCC
 AGCAGCTGCGGCAGGAGGTGTAGTGGACATCCTGAAGACCACGTGCCAGCTCCGTGAGGACAGGGGCGG
 CATGATCCAGACATGCGAGCAGTACCAGTTTGTGACCACGTGATGACCTCTACGAAAAGCAGCTGTCC
 CACCAGTCCCGAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217371 representing NM_032781
 Red=Cloning site Green=Tags(s)

MNYEGARSERENHAADDSEGGALDMCCSERLPLGPQIVMEALDEAEGLQDSQREMPPPPPSPSPDPAQ
 KPPPRGAGSHSLTVRSSLCLFAASQFLLACGVLWFSYGHISQWVSNATNLVSSLLTLLKQLEPTAWLDSGT
 WGVPSLLLVLVSVGLVLTTLVWHLLRTPPEPPTPLPPEDRRQSVSRQPSFTYSEWMEEKIEDDFLDLDP
 VPETPVDFDCVMDIKPEADPTSLTVKSMGLQERRGSNVSLTDMCTPGCNEEGFGLMSPREESAREYLLS
 ASRVLQAEELHEKALDPFLLQAEFFEIPMNFVDPKEYDIPGLVRKNRYKTIILPNPHSRVCLTSPDPDDPL
 SSYINANYIRGYGEEKVYIATQGPVIVSTVADFWRMVWQEHTPIIVMITNIEEMNEKCTEYWPVEQVAYD
 GVEITVQKVIHTEDYRLRLISLKSGETEERGLKHYWFTSWPDQKTPDRAPLLHLVREVEEAQQEGPHCA
 PIIVHCSAGIGRTGCFIATSICCCQLRQEGVVDILKTTCCQLRQDRGGMIIQTCEQYQFVHHVMSLYEKQLS
 HQSPE

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_032781

ORF Size: 1695 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_032781.2](#), [NP_116170.2](#)

RefSeq Size: 2965 bp

RefSeq ORF: 1698 bp

Locus ID: 84867

UniProt ID: [P54829](#)

Cytogenetics: 11p15.1

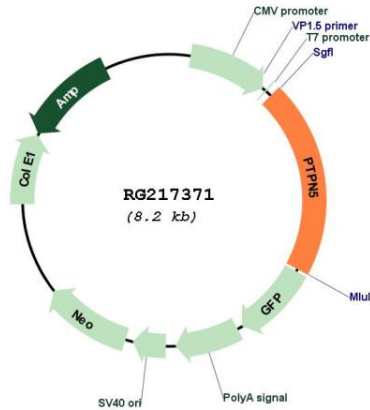
Domains: Y_phosphatase, PTPc_motif

Protein Families: Druggable Genome, Phosphatase, Transmembrane

Protein Pathways: MAPK signaling pathway

Gene Summary: May regulate the activity of several effector molecules involved in synaptic plasticity and neuronal cell survival, including MAPKs, Src family kinases and NMDA receptors. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG217371