

## Product datasheet for **RC208953**

### **PTPN5 (NM\_006906) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTPN5 (NM_006906) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPN5
Synonyms:	PTPSTEP; STEP; STEP61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC208953 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATTATGAGGAGCCAGGAGTGAGAGAGAGAACCACGCTGCTGATGACTCCGAGGGAGGGCCCTGG  
 ACATGTGCTGCAGTGAGAGGCTACCGGGTCTCCCCAGCCGATAGTGATGGAGGCACTGGACGAGGCTGA  
 AGGGCTCCAGGACTCACAGAGAGAGATGCCGCCACCCCTCCTCCCTCGCCGCCCTCAGATCCAGCTCAG  
 AAGCCACCACCTCGAGGCGCTGGGAGCCACTCCCTCACTGTCAGGAGCAGCCTGTGCCTGTTTCGCTGCCT  
 CACAGTTCCTGCTGCTGTGGGGTCTCTGGTTCAGCGGTTATGGCCACATCTGGTTCACAGAACGCCAC  
 AAACCTCGTCTCCTCTTTGCTGACGCTCCTGAAACAGCTGGAACCCACGGCCTGGCTTGACTCTGGGACG  
 TGGGGAGTCCCCAGTCTGCTGCTGGTCTTTCTGTCCGTGGGCCTGGTCTCGTTACCACCCTGGTGTGGC  
 ACCTCCTGAGGACACCCAGAGCCACCCACCCACTGCCCTGAGGACAGGCGCCAGTCACTGAGCCG  
 CCAGCCCTCCTTACCTACTCAGAGTGGATGGAGGAGAAGATCGAGGATGACTTCTGGACTCGACCCG  
 GTGCCGAGACTCCTGTGTTGATTGTGTGATGGACATCAAGCCTGAGGCTGACCCACCTCACTCACCG  
 TCAAGTCCATGGGTCTGCAGGAGAGGAGGGTCCAATGTCTCCCTGACCTGGACATGTGCACTCCGGG  
 CTGCAACGAGGAGGGCTTTGGCTATCTCATGTCCACAGTGGAGGAGTCCGCCCGGAGTACCTGCTCAGC  
 GCCTCCCGTGTCTCCAAGCAGAAGAGCTTCATGAAAAGGCCCTGGACCTTTCTGCTGCAGGCGGAAT  
 TCTTTGAAATCCCATGAACTTTGTGGATCCGAAAAGAGTACGACATCCCTGGGCTGGTGCAGGAAACCG  
 GTACAAAACCATACTTCCCAACCTCACAGCAGAGTGTGTCTGACCTCACCAGACCCTGACGACCCTCTG  
 AGTTCCTACATCAATGCCAACTACATCCGGGCTATGGTGGGGAGGAGAAGGTGTACATGCCACTCAGG  
 GACCCATCGTCAGCACGGTCGCGACTTCTGGCGCATGGTGTGGCAGGAGCACAGCCCATCATTTGTCAT  
 GATCACCAACATCGAGGAGATGAACGAGAAATGCACCGAGTATTGGCCGGAGGAGCAGGTGGCGTACGAC  
 GGTGTTGAGTACTGTGCAGAAAGTATTACACCGGAGGATTACCGGCTGCGACTCATCTCCCTCAAGA  
 GTGGGACTGAGGAGCGAGGCCTGAAGCATTACTGGTTCACATCCTGGCCCGACAGAAGACCCAGACCG  
 GGCCCCCCTACTCTGCACCTGGTGCAGGAGGTGGAGGAGGAGCCAGCCAGGAGGGGCCCTACTGTGCC  
 CCCATCATCGTCCACTGCAGTGCAGGGATTGGGAGGACCGGCTGCTTATTGCCACCAGCATCTGCTGCC  
 AGCAGCTGCGGCAGGAGGTGTAGTGGACATCCTGAAGACCACGTGCCAGCTCCGTGAGGACAGGGGCGG  
 CATGATCCAGACATGCGAGCAGTACCAGTTTGTGACCACGTGATGACCTCTACGAAAAGCAGCTGTCC  
 CACCAGTCCCAGAA

**ACGGT**ACGGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208953 protein sequence  
 Red=Cloning site Green=Tags(s)

MNYEGARSERENHAADDSEGGALDMCCSERLPGLPQPIVMEALDEAEGLDQSQREMPPPPPSPSPDPAQ  
 KPPPRGAGSHSLTVRSSLCLFAASQFLLACGVLWFSYGHYIWSQATNLVSSLLTLKQLEPTAWLDSGT  
 WGVPSLLLVLVSVGLVLTTLVWHLRTPPEPTPLPPEDRRQSVSRQPSFTYSEWMEEKIEDDFLDLDP  
 VPETPVFDCVMDIKPEADPTSLTVKSMGLQERRGSNVSLTDMCTPGCNEEGFYLMSPREESAREYLLS  
 ASRVLQAEELHEKALDPFLLQAEFFEIPMNFVDPKEYDIPGLVRKNRYKTILPNPHSRVCLTSPDPDDPL  
 SSYINANYIRGYGEEKVYIATQGPVSTVADFWRMVQEHPTIIVMITNIEEMNEKCTEYWPVEEQVAYD  
 GVEITVQKVIHTEDYRLRLISLKSGETEERGLKHYWFTSWPDQKTPDRAPLLHLVREVEEAQQEGPHCA  
 PIIVHCSAGIGRTGCFIATSICCCQLRQEGVVDILKTTCCQLRQDRGMIQTCEQYQFVHHVMSLYEKQLS  
 HQSPE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6049\\_h09.zip](https://cdn.origene.com/chromatograms/mk6049_h09.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_006906

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\\_006906.1](#), [NP\\_008837.1](#)

RefSeq Size: 3201 bp

RefSeq ORF: 1698 bp

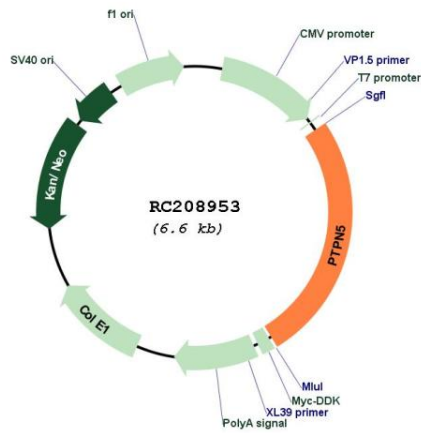
Locus ID: 84867

UniProt ID: [P54829](#)

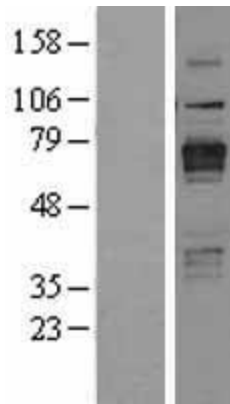
Cytogenetics: 11p15.1

**Protein Families:** Druggable Genome, Phosphatase, Transmembrane  
**Protein Pathways:** MAPK signaling pathway  
**MW:** 63.5 kDa  
**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]

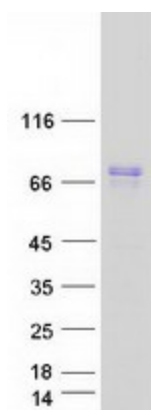
**Product images:**



Circular map for RC208953



Western blot validation of overexpression lysate (Cat# [LY403199]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC217371] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPN5 protein (Cat# [TP308953]). The protein was produced from HEK293T cells transfected with PTPN5 cDNA clone (Cat# RC208953) using MegaTran 2.0 (Cat# [TT210002]).