

## Product datasheet for **MR209281**

### **Ptpn11 (NM\_011202) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ptpn11 (NM_011202) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ptpn11
Synonyms:	2700084A17Rik; AW536184; PTP1D; PTP2C; SAP-2; SH-PTP2; SH-PTP3; SHP-2; Shp2; Syp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR209281 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGACATCGCGGAGATGGTTTCACCCCAACATCACTGGTGTGGAGGCAGAGAATCTCCTGCTGACCAGAG  
 GAGTCGATGGCAGTTTTTTAGCAAGGCCAGTAAGAGTAACCCTGGAGACTTCACCTCTGTCTGTTAGAAG  
 AAATGGAGCTGTTACCCACATCAAGATTAGAACAAGTGGGACTACTATGACCTCTATGGTGGGAGAAAG  
 TTTGCCACTTTGGCTGAACTGGTTCAGTATTACATGGAACACCATGGGCAGCTGAAAAGAGAAGAATGGAG  
 ATGTTATCGAGCTCAAGTACCCGCTGAACTGTGCAGACCTACCTCTGAAAGGTGGTTCCATGGTCACTT  
 GTCTGGAAAAGAAGCAGAGAAGCTGCTGACGGAGAAGGGCAAGCATGGCAGCTTCCTCGTTCGAGAGAGC  
 CAGAGCCACCCCGGAGACTTCGTCTCTCCGTGCGCACTGGTGACGACAAAGGGGAGAGCAACGACGGCA  
 AGTCCAAAGTGACCCACGTATGATCCGCTGTCAGGAGCTGAAAACGACGTTGGTGGGGGAGAGCGCTT  
 TGACTCTCTGACAGACCTGGTGGAGCATTACAAGAAGAACCCATGGTGGAGACGCTGGGCACAGTCTCTG  
 CAGCTCAAGCAGCCCTCAACACAACCTCGTATCAATGCTGCTGAAATTGAAAGCCGGGTTTCGAGAGTTAA  
 GCAAGCTGGCTGAGACCACAGATAAAGTCAAGCAGGGCTTTTGGGAAGAGTTTGAGACGCTCCAGCAACA  
 GGAATGCAAACTTCTCTATAGCCGAAAAGAAGGACAGAGACAAGAAAATAAAAACAAAAACAGATACAAA  
 AACATCCTGCCCTTTGATCATACCAGGGTCTTCTGATGATGGGGATCCCAATGAGCCTGTTTCTGATT  
 ACATTAATGCAACATCATATGCTGAGTTTGGACCAAGTGAACAATTCCAAACCCAAAAAGAGTTA  
 CATTGCCACTCAAGGCTGCCTGCAGAACCGGTGAATGACTTCTGGCGGATGGTGTCCAGGAGAAGTCT  
 CGAGTCATTGTCATGACCACAAAGGAAGTGGAGAGAGGGAAGCAAAATGTGTCAAGTACTGGCCTGATG  
 AGTATGCGCTCAAAGAATACGGGTGTCGCTGTTAGGAACGTCAAAGAAAAGTCCCGCCCATGACTACAC  
 TTTACGAGAGCTCAAACCTCTAAGGTCCGACAAGCTCTACTCCAGGAAAACACAGAGAGAACCCTCTGG  
 CAGTACCACTTTTCGACCTGGCCAGACCATGGCGTGCCTAGTGACCCTGGAGGTGTGCTGGACTTCTGG  
 AGGAGGTCCACCACAAGCAGGAGAGCATCGTGGATGCAGGCCCTGCTGGTTCCTGACGCGCTGGGAT  
 TGGCCGGACAGGAACCTTATTGTGATTGACATCCTTATTGACATCATTGAGAGAAAGGTGGACTGT  
 GACATCGAGCTTCTAAAACATTAGATGGTGCCTCCAGAGGTCCGGGATGGTCCAGACAGAAGCAC  
 AGTACCGGTTTATCTACATGGCTGTCCAGCACTACATAGAGACGCTGCAGCGCCGGATCGAGGAGGAGCA  
 GAAAAGCAAAAGAAAAGGACATGAATATACCAATATTAAGTATTCCTTGGTGGACCAGACAAGTGGTGT  
 CAGAGTCCCTGCCACCCTGCACCCCAAGCCACCTGTGCAGAAATGAGGGAGGACAGCGCCCGAGTCT  
 ATGAGAACGTGGGCTCATGCAGCAGCAGAGGAGTTTCAGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR209281 protein sequence  
 Red=Cloning site Green=Tags(s)

MTSRRWFHPNITGVEAENLLLTRGVDGSFLARPSKSNPGDFTLSVRRNGAVTHIKIQNTGDYYDLYGGEK  
 FATLAEVQYYMEHHGQLKEKNGDVIELKYPLNCADPTSERWFHGHLSGKEAEKLLTEKGKHSFLVRES  
 QSHPGDFVLSVRTGDDKESNDGKSKVTHVMIRCQELKYDVGGERFDSLTDLVEHYKKNPMVETLGTVL  
 QLKQPLNTRINAAEIESRVRELSKLAETTDKVKQGFWEFETLQQECKLLYSRKEGQRQENKNKNRYK  
 NILPFDHTRVVLHDGDPNEPVSVDYINANIIMPEFETKCNNSKPKKSYIATQGCLQNTVNDVFRMVFQENS  
 RVIVMTTKEVERGKSKCVKYPDEYALKEYGVMRVRNVKESAAHDYTLRELKLSKVGQALLQGNTERTVW  
 QYHFRTPDHGVPSPDGGVLDLFLVEVHHKQESIVDAGPVVHCSAGIGRTGTFIVIDILIDIIREKGVDC  
 DIDVPKTIQMVRSQRSQSGMVQTEAQYRFIYMAVQHYIETLQRRIEEEQKSKRKGHEYTNIKYSLVDQTS  
 QSLPPTPTPPCAEMREDSARVYENVGLMQQQRQSRFR

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_011202

ORF Size: 1794 bp

OTI Disclaimer: 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

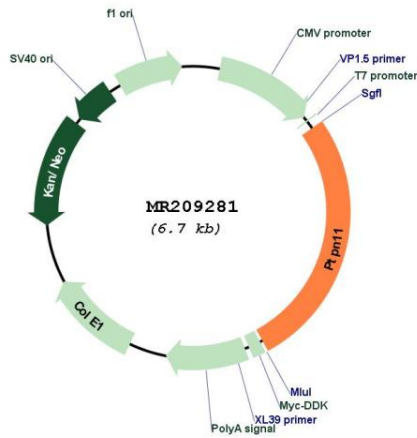
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_011202.3](#), [NP\\_035332.1](#)

RefSeq Size: 5628 bp  
 RefSeq ORF: 1794 bp  
 Locus ID: 19247  
 UniProt ID: [P35235](#)  
 Cytogenetics: 5 F  
 MW: 68.5 kDa

**Gene Summary:** Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. Positively regulates MAPK signal transduction pathway. Dephosphorylates GAB1, ARHGAP35 and EGFR. Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity. Dephosphorylates CDC73.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR209281