

## Product datasheet for MR219967

### Ptpa (NM\_138748) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ptpa (NM_138748) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ptpa
Synonyms:	2610042B21Rik; C77440; N28142; Ppp2r4; PR53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR219967 representing NM_138748 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGAGGGCGAGCGGCAGCCGCCAGATTCTTCAGAAGAGACCCCTCCAACACTCAGAACTTTA  
TCATTCAAAAAAGGAGATCCACACAGTTCAGATATGGGCAAATGGAAGCGCTCTCAGGCATATGCTGA  
CTACATTGGCTTCATCCTTACCCTCAATGAAGGTGTGAAGGGGAAGAAGCTGACCTTCGACTACAAAGTC  
TCTGAGGCCATCGAGAAGCTGGTGGCACTTCTTGATACGCTGGATAGGTGGATTGATGAAACCCCGCCAG  
TGGACCAGCCTTCCCGTTTGGGAACAAAGCCTACAGAACCTGGTATGCCAACTTGATCAGGAAGCAGA  
AACTTGGTGGCCACAGTGGTCCCACCCACCTGGCTGCTGCTGTGCCTGAAGTGGCAGTTTACCTGAAG  
GAGGCTGTGGGAACTCCACACGAATTGACTATGGCACAGGGCATGAGGCTGCCTTTGCTGCTTTCCTCT  
GTTGTCTCTGCAAGATTGGTGTACTCCGGTGGACGACCAGGTGGCTATTGTCTTCAAGGTGTTTATAG  
GTATCTTGAGGTTATGCGGAAGTTGCAGAAGACATACAGGATGGAGCCTGCAGGCAGCCAGGGCGTATGG  
GGTCTGGATGACTTCCAGTTCCTGCCCTCATCTGGGGCAGCTCACAGCTCATAGACCACCCCACTGG  
AGCCCAGACATTCGTGGATGAGAAGGCGGTGAGCGAGAACCACAAGGACTACATGTTTCTCCAGTGCAT  
CCTGTTTCACTGAGATGAAGACTGGCCCTTTGCGGAACACTCAACCAGCTGTGGAACATCAGTGTCT  
GTCCCCCTGGTCTAAAGTGAACCAGGGCCTCATTGCAATGTATAAGGCAGAGTGCCTGGAGAAGTTCC  
CTGTGATCCAGCACTTCAAGTTCGGGAGCCTGCTGCCCATCCATCCCGTCACATCAGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR219967 representing NM\_138748  
Red=Cloning site Green=Tags(s)

MAEGERQPPPDSSSEETPPTTQNFIIIPKKEIHTVPDMGKWKRSQAYADYIGFILTLNEGKGGKLTFDYKV  
 SEATIEKLVALLDTLDRWIDETPPVDQPSRFGNKAYRTWYAKLDQEAENLVATVVPHTLAAAVPEVAVYLK  
 EAVGNSTRIDYGTGHEAAFAAFLCCLCKIGVLRVDDQVAIVFKVFDRYLEVMRKLQKTYRMEPAGSQGVW  
 GLDDDFQLPFIWGSQQLIDHPHLEPRHFVDEKAVSENHKDYMFLLQCILFITEMKTPGPF AEHSNQLWNISA  
 VPSWSKVNQGLIRMYKAECKLEKFPVIQHFKFGSLLPIHPVTSG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9042\\_f05.zip](https://cdn.origene.com/chromatograms/mm9042_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_138748

**ORF Size:** 969 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\\_138748.5](#), [NP\\_620087.3](#)

**RefSeq Size:** 2577 bp

**RefSeq ORF:** 972 bp

**Locus ID:** 110854

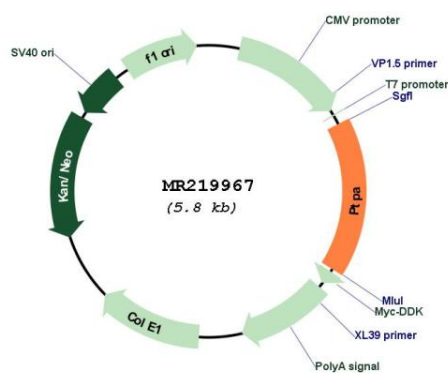
**UniProt ID:** [P58389](#)

**Cytogenetics:** 2 21.71 cM

**MW:** 37.2 kDa

**Gene Summary:** PPlases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. Acts as a regulatory subunit for serine/threonine-protein phosphatase 2A (PP2A) modulating its activity or substrate specificity, probably by inducing a conformational change in the catalytic subunit, a proposed direct target of the PPlase. Can reactivate inactive phosphatase PP2A-phosphatase methylesterase complexes (PP2A(i)) in presence of ATP and Mg(2+). Reversibly stimulates the variable phosphotyrosyl phosphatase activity of PP2A core heterodimer PP2A(D) in presence of ATP and Mg(2+) (in vitro). The phosphotyrosyl phosphatase activity is dependent of an ATPase activity of the PP2A(D):PPP2R4 complex. Is involved in apoptosis; the function appears to be independent from PP2A (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR219967