

## Product datasheet for RC212193

### PTP4A3 (NM\_032611) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PTP4A3 (NM\_032611) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PTP4A3  
**Synonyms:** PRL-3; PRL-R; PRL3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC212193 representing NM\_032611  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCGGATGAACCGCCCGCCCGGTGGAGGTGAGCTACAAACACATGCGTTCCTCATCACCCACA  
ACCCACCAACGCCACGCTCAGCACCTTCATTGAGGACCTGAAGAAGTACGGGGTACCCTGTGGTGGC  
TGTGTGTAAGTGACCTATGACAAAACGCCCTGGAGAAGGATGGCATCACCGTTGTGGACTGGCCGTT  
GACGATGGGGCGCCCCCGCAAGGTAGTGAAGACTGGCTGAGCCTGGTGAAGCCAAATTCTGTG  
AGGCCCGGCAGCTGCGTGGCTGTGCACTGCGTGGCGGGCTGGCCGGGCTCCAGTCTTGTGGCGCT  
GGCGCTTATTGAGAGCGGATGAAGTACGAGGACGCCATCCAGTTCATCCGCCAGAAGCGCCGGAGCC  
ATCAACAGCAAGCAGCTCACCTACCTGGAGAAATACCGGCCAAACAGAGGCTGCGGTTCAAAGACCCAC  
ACACGCACAAGACCCGGTGTGCGTTATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212193 representing NM\_032611  
Red=Cloning site Green=Tags(s)

MARMNRPAPVEVSYKHMRFILITHNPTNATLSTFIEDLKKYGATTVVRVCEVTYDKTPLEKDGITVVDWPF  
DDGAPPGKVVEDWLSLVKAKFCEAPGSCVAVHCVAGLGRAPVLVALALIESGMKYEDAIQFIRQKRRGA  
INSKQLTYLEKYRPKQRLRFKDPHHTKTRCCVM

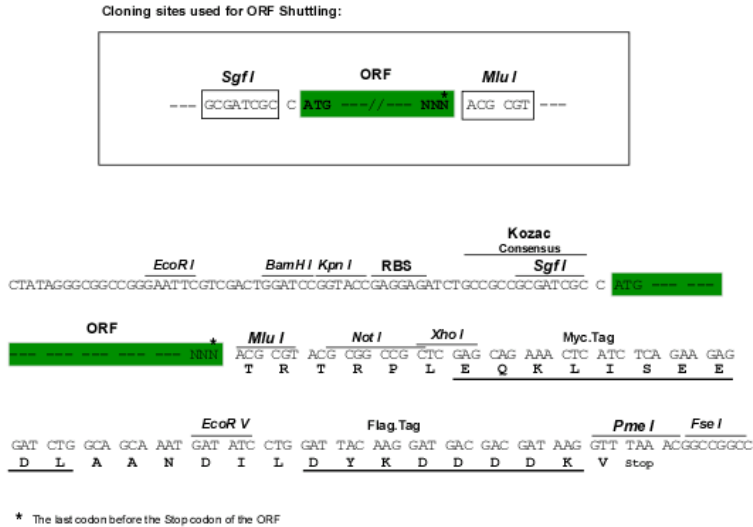
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6506\\_e02.zip](https://cdn.origene.com/chromatograms/mk6506_e02.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_032611

ORF Size: 519 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_032611.1](#), [NP\\_116000.1](#)

**RefSeq Size:** 1396 bp

**RefSeq ORF:** 522 bp

**Locus ID:** 11156

**UniProt ID:** [O75365](#)

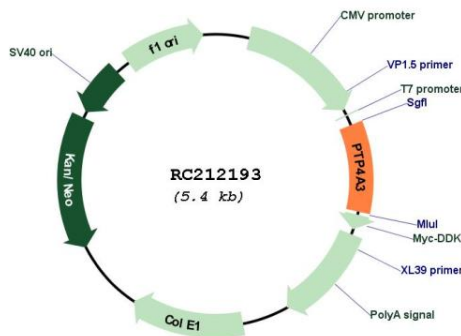
**Cytogenetics:** 8q24.3

**Protein Families:** Druggable Genome, Phosphatase

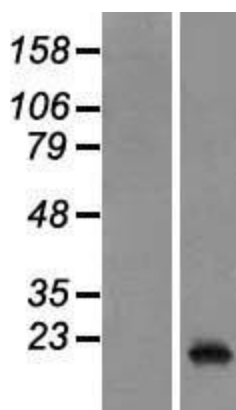
**MW:** 19.4 kDa

**Gene Summary:** This gene encodes a member of the protein-tyrosine phosphatase family. Protein tyrosine phosphatases are cell signaling molecules that play regulatory roles in a variety of cellular processes. Studies of this class of protein tyrosine phosphatase in mice demonstrates that they are prenylated in vivo, suggesting their association with cell plasma membrane. The encoded protein may enhance cell proliferation, and overexpression of this gene has been implicated in tumor metastasis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

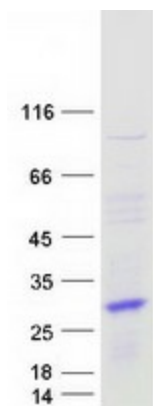
**Product images:**



Circular map for RC212193



Western blot validation of overexpression lysate (Cat# [LY410006]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212193 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTP4A3 protein (Cat# [TP312193]). The protein was produced from HEK293T cells transfected with PTP4A3 cDNA clone (Cat# RC212193) using MegaTran 2.0 (Cat# [TT210002]).