

## Product datasheet for **RC200435**

### PTP4A1 (NM\_003463) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PTP4A1 (NM\_003463) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PTP4A1  
**Synonyms:** HH72; PRL-1; PRL1; PTP(CAAX1); PTPCAAX1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC200435 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCGAATGAACCGCCAGCTCCTGTGGAAGTCACATACAAGAACATGAGATTTCTTATTACACACA  
ATCCAACCAATGCGACCTTAAACAAATTTATAGAGGAACCTAAGAAGTATGGAGTTACCACAATAGTAAG  
AGTATGTGAAGCAACTTATGACTACTCTTGTGGAGAAAGAAGGTATCCATGTTCTTGATTGGCCTTTT  
GATGATGGTGCACCACCATCAACCAGATTGTTGATGACTGGTTAAGTCTTGTGAAAATTAAGTTTCGTG  
AAGAACCTGGTTGTTGTATTGCTGTTTCATTGCGTTGCAGGCCTTGGGAGAGCTCCAGTACTGTTGCCCT  
AGCATTAAATTGAAGGTGGAATGAAATACGAAGATGCAGTACAATTCATAAGACAAAAGCGCGTGGAGCT  
TTTAACAGCAAGCAACTTCTGTATTTGGAGAAGTATCGTCCTAAAATGCGGCTGCGTTTCAAAGATTCCA  
ACGGTCATAGAAACAACCTGTTGCATTCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC200435 protein sequence  
Red=Cloning site Green=Tags(s)  
MARMNRPAPVEVYKNNMRFILITHNPTNATLNKFI EELKKYGVTTIVRVCEATYDITLVEKEGIHVLDPWF  
DDGAPPSNQIVDDWLSLVKIKFREEPGCCIAVHCVAGLGRAPVLVALALIEGGMKYEDAVQFIRQKRRGA  
FNSKQLLYLEKYRPMRLRFKDSNGHRNNCCIQ

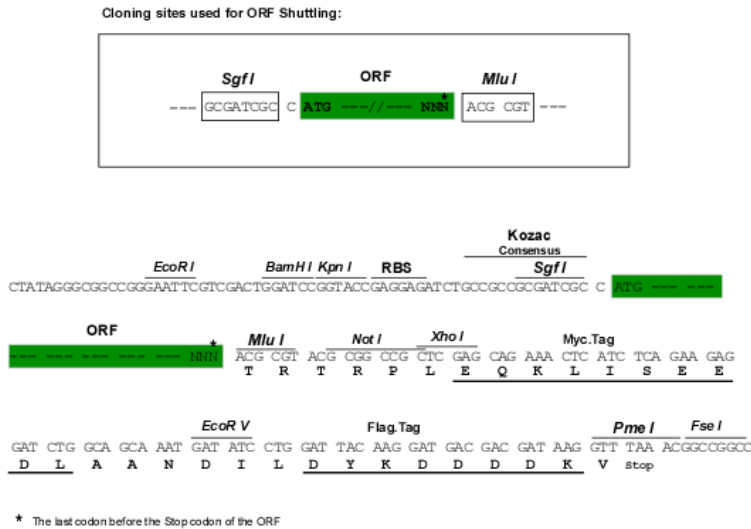
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6429\\_d10.zip](https://cdn.origene.com/chromatograms/mk6429_d10.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_003463

ORF Size: 519 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.

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

RefSeq: [NM\\_003463.4](#)

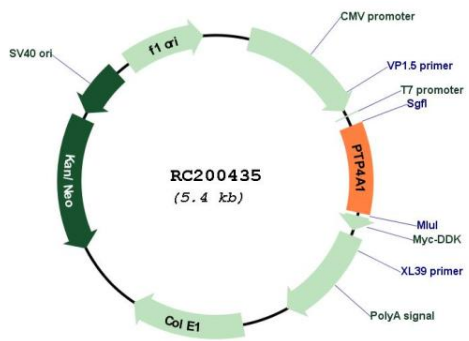
RefSeq Size: 5093 bp

RefSeq ORF: 522 bp

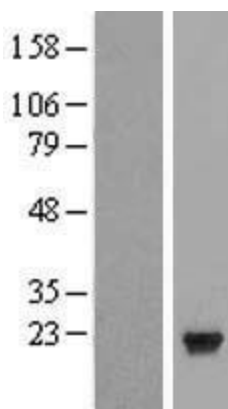
**Locus ID:** 7803  
**UniProt ID:** [Q93096](#)  
**Cytogenetics:** 6q12  
**Domains:** Y\_phosphatase, PTPc\_motif  
**Protein Families:** Druggable Genome, Phosphatase  
**MW:** 19.8 kDa

**Gene Summary:** This gene encodes a member of a small class of prenylated protein tyrosine phosphatases (PTPs), which contain a PTP domain and a characteristic C-terminal prenylation motif. The encoded protein is a cell signaling molecule that plays regulatory roles in a variety of cellular processes, including cell proliferation and migration. The protein may also be involved in cancer development and metastasis. This tyrosine phosphatase is a nuclear protein, but may associate with plasma membrane by means of its prenylation motif. Pseudogenes related to this gene are located on chromosomes 1, 2, 5, 7, 11 and X. [provided by RefSeq, Jun 2013]

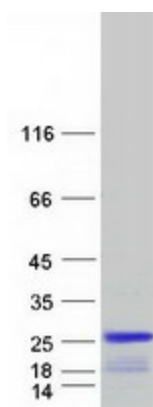
**Product images:**



Circular map for RC200435



Western blot validation of overexpression lysate (Cat# [LY418665]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200435 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTP4A1 protein (Cat# [TP300435]). The protein was produced from HEK293T cells transfected with PTP4A1 cDNA clone (Cat# RC200435) using MegaTran 2.0 (Cat# [TT210002]).