

Product datasheet for RC230972

OriGene Technologies, Inc.

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PTP4A2 (NM_001195101) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PTP4A2 (NM_001195101) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: PTP4A2

Synonyms: HH7-2; HH13; HU-PP-1; OV-1; PRL-2; PRL2; ptp-IV1a; ptp-IV1b; PTP4A; PTPCAAX2

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC230972 representing NM_001195101
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATACCGACCTAAGATGCGATTACGCTTCAGAGATACCAATGGGCATTGCTGTTCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >RC230972 representing NM_001195101

Red=Cloning site Green=Tags(s)

MNRPAPVEISYENMRFLITHNPTNATLNKFTEDWPFDDGAPPPNQIVDDWLNLLKTKFREEPGCCVAVHC VAGLGRAPVLVALALIECGMKYEDAVQFIRQKRRGAFNSKQLLYLEKYRPKMRLRFRDTNGHCCVQ

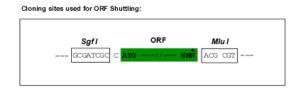
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

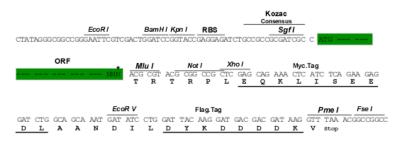
Restriction Sites: Sgfl-Mlul





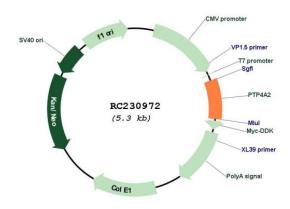
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001195101

ORF Size: 408 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



PTP4A2 (NM_001195101) Human Tagged ORF Clone - RC230972

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: <u>NM 001195101.2</u>

 RefSeq ORF:
 411 bp

 Locus ID:
 8073

 UniProt ID:
 Q12974

 Cytogenetics:
 1p35.2

Protein Families: Druggable Genome, Phosphatase

MW: 16.1 kDa

Gene Summary: The protein encoded by this gene belongs to a small class of the protein tyrosine

phosphatase (PTP) family. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. PTPs in this class contain a protein tyrosine phosphatase catalytic domain and a characteristic C-terminal prenylation motif. This PTP has been shown

to primarily associate with plasmic and endosomal membrane through its C-terminal

prenylation. This PTP was found to interact with the beta-subunit of Rab

geranylgeranyltransferase II (beta GGT II), and thus may function as a regulator of GGT II activity. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which suggested its role in tumorigenesis. Alternatively spliced transcript variants have been described. Related pseudogenes exist on chromosomes 11, 12 and 17. [provided by RefSeq,

Aug 2010]