OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC217944

PTP4A3 (NM_007079) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTP4A3 (NM_007079) 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:

>RC217944 representing NM_007079
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCGGATGAACCGCCCGGCCCCGGTGGAGGTGAGCTACAAACACATGCGCTTCCTCATCACCCACA
ACCCCACCAACGCCACGCTCAGCACCTTCATTGAGGACCTGAAGAAGTACGGGGCTACCACTGTGGTGCG
TGTGTGTGAAGTGACCTATGACAAAACGCCGCTGGAGAAGGATGGCATCACCGTTGTGGACTGGCCGTTT
GACGATGGGGCGCCCCCGCCCGGCAAGGTAGTGGAAGACTGGCTGAGCCTGGTGAAGGCCAAGTTCTGTG
AGGCCCCCGGCAGCTGCGTGGCTGTGCACTGCGTGGCGGGCCTGGGCCGGAAGCGCCGCGGAGCCATCAA
CAGCAAGCAGCTCACCTACCTGGAGAAATACCGGCCCAAACAGAGGCTGCGGTTCAAAGACCCACACACG
CACAAGACCCGGTGCTGCGTTATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217944 representing NM_007079
Red=Cloning site Green=Tags(s)

MARMNRPAPVEVSYKHMRFLITHNPTNATLSTFIEDLKKYGATTVVRVCEVTYDKTPLEKDGITVVDWPF
DDGAPPPGKVVEDWLSLVKAKFCEAPGSCVAVHCVAGLGRKRRGAINSKQLTYLEKYRPKQRLRFKDPHT
HKTRCCVM

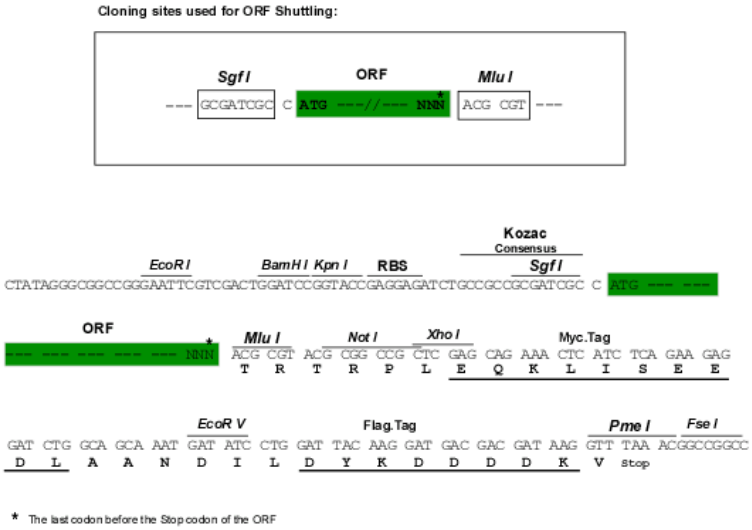
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6104_c01.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007079

ORF Size: 444 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_007079.3

RefSeq Size: 1321 bp

RefSeq ORF: 447 bp

Locus ID: 11156

UniProt ID: O75365

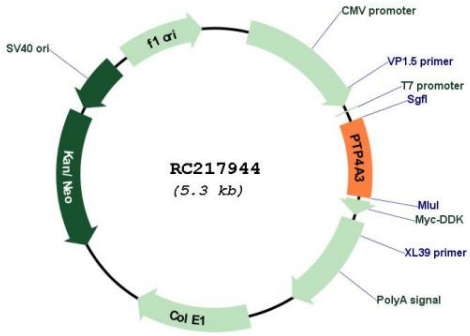
Cytogenetics: 8q24.3

Protein Families: Druggable Genome, Phosphatase

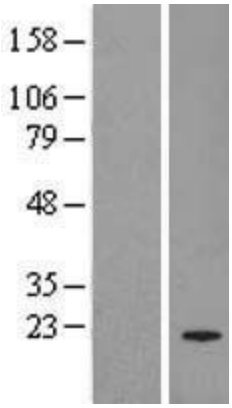
MW: 16.6 kDa

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]

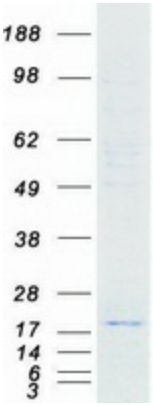
Product images:



Circular map for RC217944



Western blot validation of overexpression lysate (Cat# [LY416216]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217944 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTP4A3 protein (Cat# [TP317944]). The protein was produced from HEK293T cells transfected with PTP4A3 cDNA clone (Cat# RC217944) using MegaTran 2.0 (Cat# [TT210002]).