

Product datasheet for RC205799

PPP1R14A (NM_033256) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PPP1R14A (NM_033256) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PPP1R14A
Synonyms: CPI-17; CPI17; PPP1INL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC205799 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCTCAGCGGCTGGCAAGCGCGTGTGAGCAAGCTGCAGTCTCCATCGCGGGCCCGGGCCAG
GGGCAGTCCCGGGGGCTGCAGAAGCGGCACGCGCGTACCCTCAAGTATGACCGCGGGAGCTGCA
GCGGGCTGGACGTGGAGAAGTGGATCGACGGGCGCTGGAGGAGCTGTACCGCGCATGGAGGCAGAC
ATGCCCGATGAGATCAACATTGATGAATTGTTGGAGTTAGAGAGTGAAGAGGAGAGAAGCCGAAAATCC
AGGGACTCCTGAAGTCATGTGGAAACCTGTCGAGGACTTCATCCAGGAGCTGCTGGCAAAGCTCAAGG
CCTCCACAGGCAGCCCGCCTCCGCCAGCAAGCCCTCCACGACGGCAGCCTCAGCCCTCCAGGAC
CGGGCCCGGACTGCTCACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205799 protein sequence
Red=Cloning site Green=Tags(s)
MAAQRLLGKRVLSKLLQSPSRARGPGGSPGGLQKRHARVTVKYDRRELQRRLDVEKWIDGRLEELYRGM
EADMPDEINIDELLESEEEERSRKIQGLLSCGKPVEDFIQELLAKLQGLHRQPGLRQPSPSHDGSL
SPLQDRARTAHP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

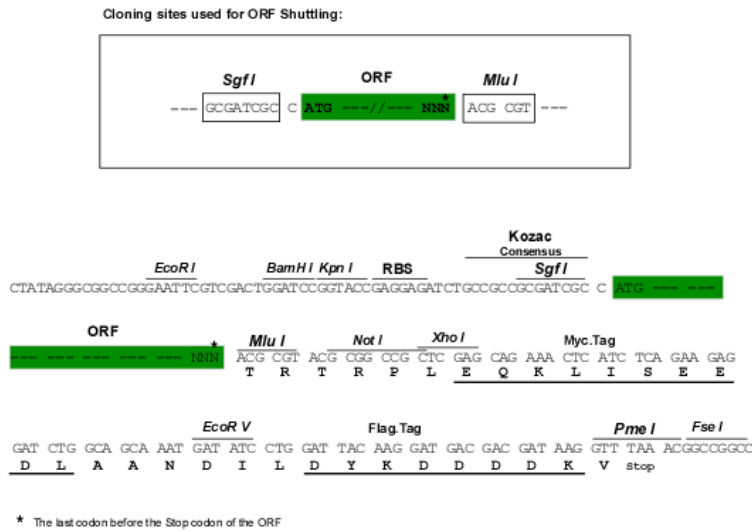
Chromatograms: https://cdn.origene.com/chromatograms/mk6066_b01.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033256

ORF Size: 441 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_033256.3](#)

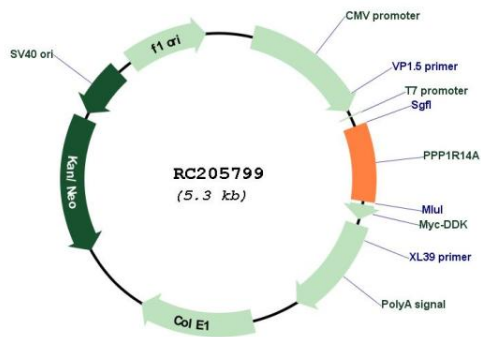
RefSeq Size: 782 bp

RefSeq ORF: 444 bp

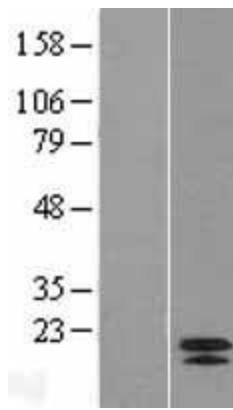
Locus ID: 94274
UniProt ID: [Q96A00](#)
Cytogenetics: 19q13.2
Domains: PP1_inhibitor
Protein Families: Druggable Genome
Protein Pathways: Vascular smooth muscle contraction
MW: 16.7 kDa

Gene Summary: The protein encoded by this gene belongs to the protein phosphatase 1 (PP1) inhibitor family. This protein is an inhibitor of smooth muscle myosin phosphatase, and has higher inhibitory activity when phosphorylated. Inhibition of myosin phosphatase leads to increased myosin phosphorylation and enhanced smooth muscle contraction. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Sep 2011]

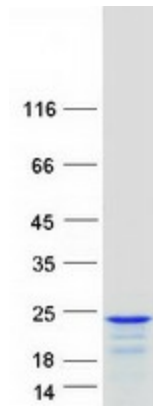
Product images:



Circular map for RC205799



Western blot validation of overexpression lysate (Cat# [LY403236]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205799 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPP1R14A protein (Cat# [TP305799]). The protein was produced from HEK293T cells transfected with PPP1R14A cDNA clone (Cat# RC205799) using MegaTran 2.0 (Cat# [TT210002]).