

Product datasheet for RC222782

PPM1B (NM_177968) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1B (NM_177968) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPM1B
Synonyms:	PP2C-beta; PP2C-beta-X; PP2CB; PP2CBETA; PPC2BETAX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222782 representing NM_177968 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGGTGCATTTTTGGATAAACCCAAAACCTGAAAAACATAATGCTCATGGTGTGGGAATGGTTTACGTT
ATGGCCTGAGCAGCATGCAAGGATGGAGAGTGGAAATGGAAGATGCACACACAGCTGTTGTAGGTATTCC
TCACGGCTTGAAGACTGGTCATTTTTTGCAGTTTATGATGGTCATGCTGGATCCCGAGTGGCAAATTAC
TGCTCAACACATTTATTAGAACACATCACTACTAACGAAGACTTTAGGGCAGCTGAAAAATCAGGATCTG
CTCTTGAGCTTTCAGTGGAAAATGTTAAGAATGGTATCAGAAGTGGATTTTTGAAAATTGATGAATACAT
GGTAACCTTTTCAGACCTCAGAAACGGGATGGACAGGAGTGGTTCAACTGCAAGTGGGAGTTATGATTTCA
CCTAAGCATATCTACTTTATCAACTGTGGTGATTCACGTGCTGTTCTGTATAGGAATGGACAAGTCTGCT
TTTCTACCCAGGATCACAAACCTTGCAATCCAAGGGAAAAGGAGCGAATCCAAAATGCAGGAGGCAGCGT
GATGATACAACGTGTTAATGGTTCATTAGCAGTATCTCGTCTCTGGGGACTATGATTACAAGTGTGTT
GATGGCAAGGGCCCAACAGAACAACCTGTTTCTCCAGAGCCTGAGGTTTATGAAATTTAAGAGCAGAAG
AGGATGAATTTATCATCTGGCTTGTGATGGGATCTGGGATGTTATGAGTAATGAGGAGCTCTGTGAATA
TGTTAAATCTAGGCTTGGATCTGATGACCTGGAAAATGTGTGCAATGGGTAGTGGACACTTGTTTA
CACAAGGGAAGTCGAGATAACATGAGTATTGTACTAGTTTGTCTTTCAAATGCTCCCAAGTCTCAGATG
AAGCGGTGAAAAAGATTACAGATTGGATAAGCACTTGGAAATCACGGGTTGAAGAGATTATGGAGAAGTC
TGGCGAGGAAGGAATGCCTGATCTTGCCCATGTATGCGCATCTTGTCTGCAGAAAATATCCCAAATTTG
CCTCTGGGGGAGGTCTTGTGCAAGCGTAATGTTATTGAAGCTGTTTATAGTAGACTGAATCCACATA
GAGAAAGTATGGGGTCTGGAGATCTAGAAGACCCATGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222782 representing NM_177968
Red=Cloning site Green=Tags(s)

MGAFLDKPKTEKHNAHGAGNGLRYGLSSMQGWRVEMEDAHTAVVGIPHGLEDWSFFAVYDGHAGSRVANY
 CSTHLLLEHITTNEFDRAAGKSGSALELSVENVKNGIRTGFLKIDEYMRNFSDLRNGMDRSGSTAVGVMIS
 PKHIYFINCGDSRAVL YRNGQVCFSTQDHKPCNPREKERIQNAGGSVMIQRVNGSLAVSRALGDYDYKCV
 DGKGPTEQLVSPEPEVYEILRAEDEFIILACDGIWDVMSNEELCEYVKSRLLEVSDDLNVCNWVVDTCLE
 HKGSRDNMSIVLVCFSNAPKVSDEAVKKDSELDKHLSESRVEEIMEKSGEEGMPDLAHVMRILSAENIPNL
 PPGGLLAGKRNVEAVYSRLNPHRESGGAGDLEDPW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6497_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_177968

ORF Size: 1161 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_177968.4](#)

RefSeq Size: 3850 bp

RefSeq ORF: 1164 bp

Locus ID: 5495

UniProt ID: [O75688](#)

Cytogenetics: 2p21

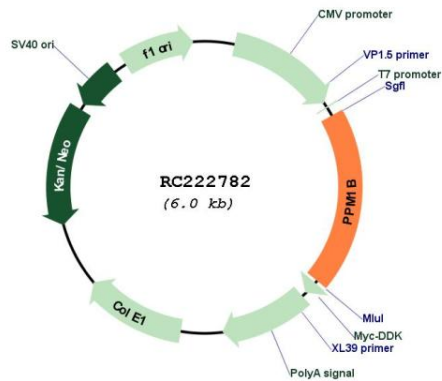
Protein Families: Druggable Genome, Phosphatase, Stem cell - Pluripotency

Protein Pathways: MAPK signaling pathway

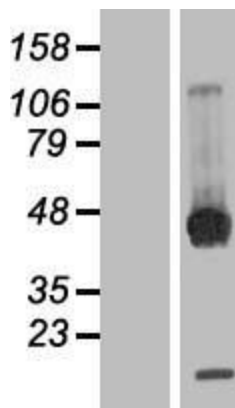
MW: 42.6 kDa

Gene Summary: The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase has been shown to dephosphorylate cyclin-dependent kinases (CDKs), and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to cause cell-growth arrest or cell death. Alternative splicing results in multiple transcript variants encoding different isoforms. Additional transcript variants have been described, but currently do not represent full-length sequences. [provided by RefSeq, Jul 2008]

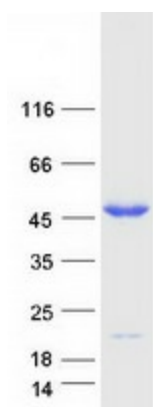
Product images:



Circular map for RC222782



Western blot validation of overexpression lysate (Cat# [LY406063]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222782 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPM1B protein (Cat# [TP322782]). The protein was produced from HEK293T cells transfected with PPM1B cDNA clone (Cat# RC222782) using MegaTran 2.0 (Cat# [TT210002]).