

## Product datasheet for **RC229231**

### PPM1A (NM\_177952) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1A (NM_177952) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPM1A
Synonyms:	PP2C-ALPHA; PP2CA; PP2Calpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC229231 representing NM\_177952  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTCTGTTCTGGGAGAAAATGGGTAGCAGAAGCTACAATTTGTTACTAAGCTAATGAAAAGAGAGAAAA  
 GAAGAATGGGGAAGAGAAGGGCAAAGAAGGCAAAAAGAGAAGAGAAAAAGGGAGGAGAGAGAAGGAG  
 AAATGAGAAAAGAGGAAACCAAATGAAGAGGATGTGTGAGAGAAAAAATATGAAACAGACCTAGAGGAT  
 CAAGACATAATGGGAGCATTTTTAGACAAGCCAAAGATGGAAAAGCATAATGCCAGGGGCAGGTAATG  
 GTTTGGCATATGGGCTAAGCAGCATGCAAGGCTGGCGTGTGAAATGGAGGATGCACATACGGCTGTGAT  
 CGGTTTGCCAAGTGGACTTGAATCGTGGTCATTCTTTGCTGTGTATGATGGGCATGCTGTTCTCAGGTT  
 GCCAAATACTGCTGTGAGCATTGTAGATCACATACCAATAACCAGGATTTTAAAGGGCTGCAGGAG  
 CACCTTCTGTGAAAATGTAAGAATGGAATCAGAACAGGTTTTCTGGAGATTGATGAACACATGAGAGT  
 TATGTCAGAGAAGAAACATGGTGCAGATAGAAGTGGGTCAACAGCTGTAGGTGTCTTAATTTCTCCCAA  
 CATACTTATTTTCACTAAGTGTGGAGACTCAAGAGGTTTACTTTGTAGGAACAGGAAAGTTTCAATTTCTCA  
 CACAAGATCACAACCAAGTAATCCGCTGGAGAAAAGAACGAATTCAGAATGCAGGTGGCTCTGTAATGAT  
 TCAGCGTGTGAATGGCTCTCTGGCTGTATCGAGGGCCCTTGGGGATTTTGATTACAAATGTGTCCATGGA  
 AAAGGTCTACTGAGCAGCTTGTCTCACCAGAGCCTGAAGTCCATGATATTGAAAGATCTGAAGAAGATG  
 ATCAGTTCATTATCCTTGCATGTGATGGTATCTGGGATGTTATGGGAAATGAAGAGCTCTGTGATTTTGT  
 AAGATCCAGACTTGAAGTCACTGATGACCTTGAGAAAGTTTGAATGAAGTAGTCGACACCTGTTTGTAT  
 AAGGGAAGTGCAGACAACATGAGTGTGATTTTGTCTGTTTTCCAATGCACCCAAAGTATCGCCAGAAG  
 CAGTGAAGAAGGAGGAGGAGTGGACAAGTACCTGGAATGCAGAGTAGAAGAAATCATAAAGAAGCAGGG  
 GGAAGGCGTCCCGACTTAGTCCATGTGATGCGCACATTAGCGAGTGAGAACATCCCCAGCCTCCCACCA  
 GGGGGTGAATTGCAAGCAAGAGGAATGTTATTGAAGCCGTTTACAATAGACTGAATCCTTACAAAATG  
 ACGACTGACTCTACATCAACAGATGATATGTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC229231 representing NM\_177952  
 Red=Cloning site Green=Tags(s)

MFCSGRKWVAEATICTKLMKREKRRMGKRRRAKAKREEKKKGGERRRNEKRGNQMKRMCKERKKYETDLED  
 QDIMGAFLDKPKMEKHNAQQGNGLYGLSSMQGWRVEMEDAHTAVIGLPSGLESWSFFAVYDGHAGSQV  
 AKYCCHELLDHIITNNQDFKGSAGAPSVENVKNGIRTGFLEIDEHMRVMSEKKHADRSGSTAVGVLISPO  
 HTYFINCDSRGLLNRNRKVHFFTDHKPSNPLEKERIQNAGGSVMIQVRVNGSLAVSRALGDFDYKCVHG  
 KGPTEQLVSPEPEVHDIERSEEDDQFIILACDGIWDMGNEELCDFVRSRLEVTDLEKVCNEVDTCLY  
 KGSRDNMSVILICFPNAPKVSPEAVKKEAELDKYLECRVEEIIKKQEGVPLVHVMRTLASENIPSLPP  
 GGELASKRNVIEAVYNRLNPYKNDDTDSTSTDDMW

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8061\\_b08.zip](https://cdn.origene.com/chromatograms/mk8061_b08.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_177952

ORF Size: 1365 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\\_177952.3](#)

RefSeq ORF: 1368 bp

Locus ID: 5494

UniProt ID: [P35813](#)

Cytogenetics: 14q23.1

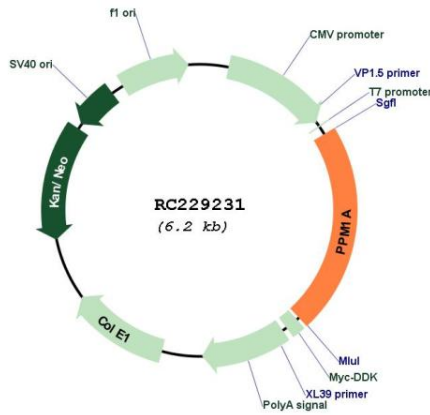
Protein Families: Druggable Genome, Phosphatase

**Protein Pathways:** MAPK signaling pathway

**MW:** 51.2 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 dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC229231