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Product datasheet for RG229231

PPM1A (NM_177952) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1A (NM_177952) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPM1A
Synonyms:	PP2C-ALPHA; PP2CA; PP2Calpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG229231 representing NM_177952
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTCTGTTCTGGGAGAAAATGGGTAGCAGAAGCTACAATTTGTACTAAGCTAATGAAAAGAGAGAAAA
GAAGAATGGGGAAGAGAAGGGCAAAGAAGGCAAAAAGAGAAGAGAAGAAAAAGGGAGGAGAGAGAAGGAG
AAATGAGAAAAGAGGAAACCAAATGAAGAGGATGTGTGAGAGAAAAAAATATGAAACAGACCTAGAGGAT
CAAGACATAATGGGAGCATTTTTAGACAAGCCAAAGATGGAAAAGCATAATGCCCAGGGGCAGGGTAATG
GGTTGCGATATGGGCTAAGCAGCATGCAAGGCTGGCGTGTTGAAATGGAGGATGCACATACGGCTGTGAT
CGGTTTGCCAAGTGGACTTGAATCGTGGTCATTCTTTGCTGTGTATGATGGGCATGCTGGTTCTCAGGTT
GCCAAATACTGCTGTGAGCATTTGTTAGATCACATCACCAATAACCAGGATTTTAAAGGGTCTGCAGGAG
CACCTTCTGTGGAAAATGTAAAGAATGGAATCAGAACAGGTTTTCTGGAGATTGATGAACACATGAGAGT
TATGTCAGAGAAGAAACATGGTGCAGATAGAAGTGGGTCAACAGCTGTAGGTGTCTTAATTTCTCCCCAA
CATACTTATTTCATTAACTGTGGAGACTCAAGAGGTTTACTTTGTAGGAACAGGAAAGTTCATTTCTTCA
CACAAGATCACAAACCAAGTAATCCGCTGGAGAAAGAACGAATTCAGAATGCAGGTGGCTCTGTAATGAT
TCAGCGTGTGAATGGCTCTCTGGCTGTATCGAGGGCCCTTGGGGATTTTGATTACAAATGTGTCCATGGA
AAAGGTCCTACTGAGCAGCTTGTCTCACCAGAGCCTGAAGTCCATGATATTGAAAGATCTGAAGAAGATG
ATCAGTTCATTATCCTTGCATGTGATGGTATCTGGGATGTTATGGGAAATGAAGAGCTCTGTGATTTTGT
AAGATCCAGACTTGAAGTCACTGATGACCTTGAGAAAGTTTGCAATGAAGTAGTCGACACCTGTTTGTAT
AAGGGAAGTCGAGACAACATGAGTGTGATTTTGATCTGTTTTCCAAATGCACCCAAAGTATCGCCAGAAG
CAGTGAAGAAGGAGGCAGAGTTGGACAAGTACCTGGAATGCAGAGTAGAAGAAATCATAAAGAAGCAGGG
GGAAGGCGTCCCCGACTTAGTCCATGTGATGCGCACATTAGCGAGTGAGAACATCCCCAGCCTCCCACCA
GGGGGTGAATTGGCAAGCAAGAGGAATGTTATTGAAGCCGTTTACAATAGACTGAATCCTTACAAAAATG
ACGACACTGACTCTACATCAACAGATGATATGTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

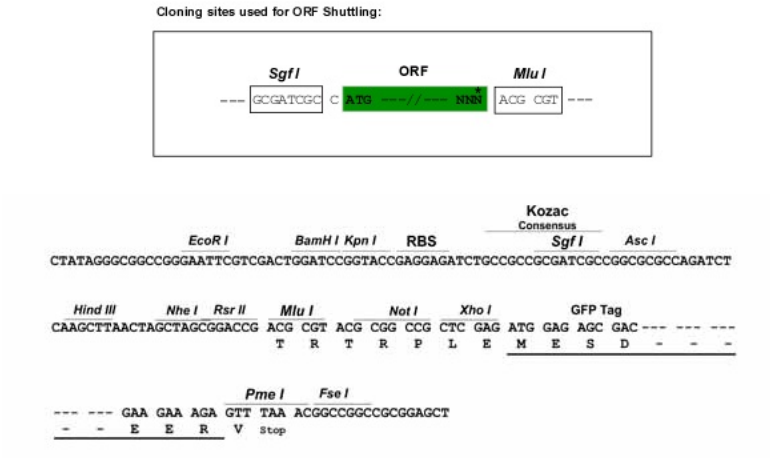
>RG229231 representing NM_177952
Red=Cloning site Green=Tags(s)

MFCSGRKWVAEATICTKLMKREKRRMGKRRAKKAKREEKKKGGERRRNEKRGNQMKRMCERKKYETDLED
QDIMGAFLDKPKMEKHNAQGQGNGLRYGLSSMQGWRVEMEDAHTAVIGLPSGLESWSFFAVYDGHAGSQV
AKYCCEHLLDHITNNQDFKGSAGAPSVENVKNGIRTGFLEIDEHMRVMSEKKHGADRSGSTAVGVLISPQ
HTYFINCGDSRGLLCRNRKVHFFTQDHKPSNPLEKERIQNAGGSVMIQRVNGSLAVSRALGDFDYKCVHG
KGPTEQLVSPEPEVHDIERSEEDDQFIILACDGIWDVMGNEELCDFVRSRLEVTDDLEKVCNEVVDTCLY
KGSRDNMSVILICFPNAPKVSPEAVKKEAELDKYLECRVEEIIKKQGEGVPDLVHVMRTLASENIPSLPP
GGELASKRNVIEAVYNRLNPYKNDDTDSTSTDDMW

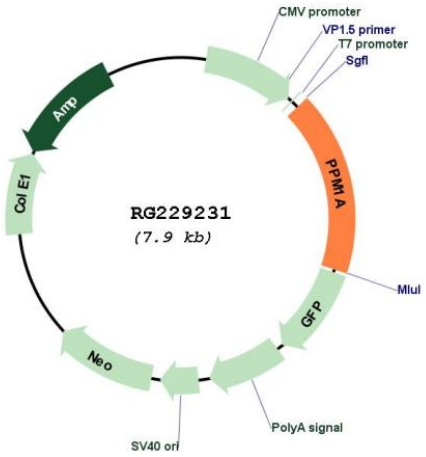
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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 Size:	8075 bp
RefSeq ORF:	1368 bp
Locus ID:	5494
UniProt ID:	P35813
Cytogenetics:	14q23.1
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	MAPK signaling pathway
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]