

Product datasheet for **SC312956**

PPM1A (NM_177951) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1A (NM_177951) Human Untagged Clone
Tag:	Tag Free
Symbol:	PPM1A
Synonyms:	PP2C-ALPHA; PP2CA; PP2Calpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC312956 representing NM_177951. Blue=Insert sequence Red=Cloning site Green=Tag(s)

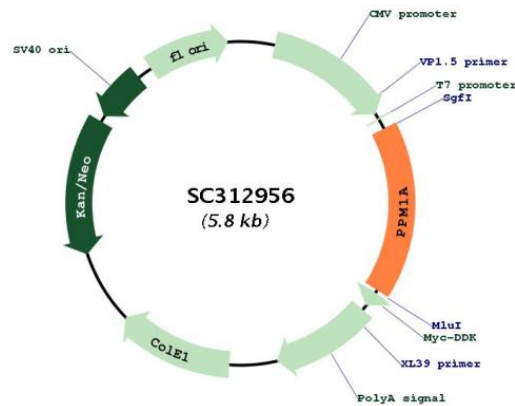
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GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGGAGCATTTT TAGACAAGCCAAAGATG GAAAAGCATAATGCCAGGGGCAGGGTAATGGGTTGCCA
TATGGGCTAAGCAGCATGCAAGGCTGGCGTGTTGAAATGGAGGATGCACATACGGCTGTGATCGGTTTG
CCAAGTGGACTTGAATCGTGGTCATTCTTTGCTGTGTATGATGGGCATGCTGGTTCTCAGGTTGCCAAA
TACTGCTGTGAGCATTGTAGATCACATACCAATAACCAGGATTTTAAAGGGTCTGCAGGAGCACCT
TCTGTGAAAAATGTAAGAATGGAATCAGAACAGGTTTTCTGGAGATTGATGAACACATGAGAGTTATG
TCAGAGAAGAAACATGGTGCAGATAGAAGTGGTCAACAGCTGTAGGTGTCTTAATTTCTCCCAACAT
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CAAGATCACAACCAAGTAATCCGCTGGAGAAAGAACGAATTCAGAATGCAGGTGGCTCTGTAATGATT
CAGCGTGTGAATGGCTCTCTGGCTGTATCGAGGGCCCTTGGGGATTTTGATTACAAATGTGTCCATGGA
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GATCAGTTCATTATCCTTGATGTGATGGTATCTGGGATGTTATGGGAAATGAAGAGCTCTGTGATTTT
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TATAAGGGAAGTCGAGACAACATGAGTGTGATTTTGATCTGTTTTCCAAATGCACCCAAAGTATCGCCA
GAAGCAGTGAAGAAGGAGGCAGAGTTGGACAAGTACCTGGAATGCAGAGTAGAAGGTGGATCATTTAAC
AAAAAATAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_177951

Insert Size: 975 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_177951.2](#)

RefSeq Size: 4334 bp

RefSeq ORF: 975 bp

Locus ID: 5494

UniProt ID:	P35813
Cytogenetics:	14q23.1
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	MAPK signaling pathway
MW:	36 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]

Transcript Variant: This variant (2) has an additional exon within the 5' UTR and lacks a few of 3' exons but has an alternate 3' segment, as compared to variant 1. The resulting isoform (2) has a distinct and shorter C-terminus, as compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.