

## Product datasheet for **SC321896**

### PPM1A (NM\_021003) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1A (NM_021003) Human Untagged Clone
Tag:	Tag Free
Symbol:	PPM1A
Synonyms:	PP2C-ALPHA; PP2CA; PP2Calpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

>OriGene sequence for NM\_021003.2  
AAGCGATGAGTCTCGGCTCTTCTCTCTCTTCTCCGGGACCCGCTCTCTGCCTCCCTCT  
CCAACGCCCGGATGATCTGAGCCGCGAGGGCGCCGACAGCCGGGGGCCGGACGCAGCCC  
GGCTCCTCCCCTCTCCGCCCTTCCCCAGCCTGACCTGGCCCGCCGCTGCAGCGGTGAC  
CCCTCCCCCGGCTGCCGCCGTCGCCGCCGCGGTGACCCCTCCCCGGTGCCGCCGCCG  
CGCTCGGCCGACCAGGGACTGCCCGCTGCGGCTGCTCCGGACCTAGAGGATCAAGAC  
ATAATGGGAGCATTTTTAGACAAGCCAAAGATGGAAAAGCATAATGCCAGGGGCAGGGT  
AATGGGTTGCGATATGGGCTAAGCAGCATGCAAGGCTGGCGTGTGAAATGGAGGATGCA  
CATACGGCTGTGATCGGTTTGCCAAAGTGGACTTGAATCGTGGTCATTCTTTGCTGTGAT  
GATGGGCATGCTGGTTCTCAGGTTGCCAAATACTGCTGTGAGCATTGTAGATCACATC  
ACCAATAACCAGGATTTAAAGGCTGTCAGGAGCACCTTCTGTGAAAAATGTAAAGAAT  
GGAATCAGAACAGGTTTTCTGGAGATTGATGAACACATGAGAGTTATGTCAGAGAAGAAA  
CATGGTGCAGATAGAAGTGGTCAACAGCTGTAGGTGTCTTAATTTCTCCCAACATACT  
TATTTCAATTAAGTGTGGAGACTCAAGAGGTTACTTTGTAGGAACAGGAAAGTTCATTTT  
TTCACACAAGATCACAACCAAGTAATCCGCTGGAGAAAGAACGAATTCAGAATGCAGGT  
GGCTCTGTAATGATTCAGCGTGTGAATGGCTCTCTGGCTGTATCGAGGGCCCTTGGGGAT  
TTTGATTACAAATGTGTCCATGGAAAAGTCTACTGAGCAGCTTGTCTCACCAGAGCCT  
GAAGTCCATGATATTGAAAGATCTGAAGAAGATGATCAGTTCAATTATCCTTGCATGTGAT  
GGTATCTGGGATGTTATGGGAAATGAAGAGCTCTGTGATTTTGTAAAGTCCAGACTTGAA  
GTCACTGATGACCTTGAGAAAGTTGCAATGAAGTAGTCGACACCTGTTTGTATAAGGGA  
AGTCGAGACAACATGAGTGTGATTTTGTCTGTTTTCAAATGCACCCAAAGTATCGCCA  
GAAGCAGTGAAGAAGGAGGCAGAGTTGGACAAGTACCTGGAATGCAGAGTAGAAGAAATC  
ATAAAGAAGCAGGGGGAAGGCGTCCCCGACTTAGTCCATGTGATGCCACATTAGCGGAT  
GAGAACATCCCCAGCCTCCCACCCAGGGGTGAATTGGCAAGCAAGAGGAATGTTATTGAA  
GCCGTTTACAATAGACTGAATCCTTACAAAAATGACGACACTGACTCTACATCAACAGAT  
GATATGTGGTAAAAGTCTCATCTAGCCATGGAGTTTACCTTACCTCCAAAGGAGAGTA  
CAGCTCAACTTTGTTGAAACTTTTAAACATCCATCCTCACTTTAAGGAAGGGGATATGAC  
ATGGGTGAGAATGATTACATCAGAGAACTTCAAGCAGTACAACAGCTAGCCAGAAGTATG  
TTTTTTTTTTTTTTTTTTGTAATTTGAGACTTATGTAAGCGTGATTTCAAACCATAATT  
CGTGTGTAATCAGACTCCAGCAATTTTGTGTATGATTTGTTTTTTGTAAGTGT  
AATTGTCCTTGTACAAAATGCTCATATTTAATTATGAACTGCTTTAAATCACTATCAAAG  
TTACAAGAAATGTTGGCTTATTGTGTGATGCAACAGATATATAGCCCTTCAAGTCATG  
TTGTGTTTGGACTTGGGTTGGAACAGGGAGAGCAGCAGCCATGTCAGCTACACGCTCAA  
ATGTGCAGATGATTATGGAAAATAACCTCAAATCTTACAAAGCTGAACATCCAAGGAGT  
TATTGAAAATCTTAAATGTTCTTGGTAGGGGAGTTGGCATTGTTGATAAAGCCAGTC  
CCTTCATTTAACTGTCTTTCAGGATGTTCTTCCGTTGTTCCATGAGTATTGCAGGTAAT  
AATACAGTGTATTATAAGAATCTCAATCTTGGGGCTAAATGCCTTGTTCCTTTGCACCT  
CTTTTCAAGTCTTACATTTAATTAATAATTGATAAGCAGCAGCTTCTACATATAGTAG  
GAAACTGCCACATTTTTGCTATCATGATTGGCTGGGCTGCTGCTGTTTCTAGTAAGATA  
TTCTGAATTCATTTTATCAATAAAGCTTGATTTAACAAACAAGAAAAA  
AAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_021003

**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).

<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021003.2</a> , <a href="#">NP_066283.1</a>
<b>RefSeq Size:</b>	2409 bp
<b>RefSeq ORF:</b>	1149 bp
<b>Locus ID:</b>	5494
<b>UniProt ID:</b>	<a href="#">P35813</a>
<b>Cytogenetics:</b>	14q23.1
<b>Domains:</b>	PP2C
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>Protein Pathways:</b>	MAPK signaling pathway
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) is the longest transcript and encodes isoform 1.</p>