

## Product datasheet for **SC109606**

### PPP2R4 (PTPA) (NM\_021131) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R4 (PTPA) (NM_021131) Human Untagged Clone
Tag:	Tag Free
Symbol:	PPP2R4
Synonyms:	PP2A; PPP2R4; PR53
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109606 sequence for NM_021131 edited (data generated by NextGen Sequencing)

```

ATGGCTGAGGGCGAGCGGCAGCCGCCAGATTCTTCAGAGGAGCCCCCTCCAGCCACT
CAGAACTTCATCATTCCAAAAAAGGAGATCCACACAGTTCAGACATGGGCAAATGGAAG
CGTTCTCAGGCATACGCTGACTACATCGGATTCATCCTTACCCTCAACGAAGGTGTGAAG
GGGAAGAAGCTGACCTTCGAGTACAGAGTCTCCGAGGCCATTGAGAACTAGTCGCTCTT
CTCAACACGCTGGACAGGTGGATTGATGAGACTCCTCCAGTGGACCAGCCCTCTCGGTTT
GGGAATAAGGCATACAGGACCTGGTATGCCAACTTGATGAGGAAGCAGAAACTGGTG
GCCACAGTGGTCCCTACCCATCTGGCAGCTGCTGTGCCTGAGGTGGCTGTTTACCTAAAG
GAGTCAGTGGGAACTCCACGCGCATTGACTACGGCACAGGCATGAGGCAGCCTTCGCT
GCTTTCCTCTGCTGTCTCTGCAAGATTGGGGTGTCCGGGTGGATGACCAAATAGCTATT
GTCTTCAAGGTGTCAATCGGTACCTTGAGGTTATGCGGAACTCCAGAAAACATACAGG
ATGGAGCCAGCCGGCAGCCAGGGAGTGTGGGTCTGGATGACTTCCAGTTTCTGCCCTTC
ATCTGGGGCAGTTCGCAGCTGATAGACCACCCATACCTGGAGCCCAGACACTTTGTGGAT
GAGAAGGCCGTGAATGAGAACCACAAGGACTACATGTTCTGGAGTGTATCCTGTTTATT
ACCGAGATGAAGACTGGCCATTTGCAGAGCACTCCAACCAGCTGTGGAACATCAGCGCC
GTCCCTTCCTGGTCCAAAGTGAACCAGGGTCTCATCCGCATGTATAAGGCCGAGTGCCTG
GAGAAGTTCCTGTGATCCAGCACTTCAAGTTCGGGAGCCTGCTGCCATCCATCCTGTG
ACGTTGGGCTAG

```

Clone variation with respect to NM\_021131.4  
965 c=>t



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_021131 unedited  
 GGGTGTCAAAATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGCCTGGCC  
 GGAGCAAGATGGCTGAGGGCGAGCGGCAGCCGCCAGATTCTTCAGAGGAGGCCCTC  
 CAGCCACTCAGAACTTCATCATTCCAAAAAGGAGATCCACACAGTTCAGACATGGGCA  
 AATGGAAGCGTTCTCAGGCATACGCTGACTACATCGGATTCATCCTTACCCTCAACGAAG  
 GTGTGAAGGGGAAGAAGCTGACCTTCGAGTACAGAGTCTCCGAGGCCATTGAGAACTAG  
 TCGCTCTTCTCAACACGCTGGACAGGTGATTGATGAGACTCCTCCAGTGGACCAGCCCT  
 CTCGGTTTTGGGAATAAGGCATACAGGACCTGGTATGCCAACTTGATGAGGAAGCAGAAA  
 ACTTGGTGGCCACAGTGGTCCCTACCCATCTGGCAGCTGCTGTGCCTGAGGTGGCTGTTT  
 ACCTAAAGGAGTCAGTGGGGAACCCACGCGCATTGACTACGGCACAGGGCATGAGGCAG  
 CCTTCGCTGCTTCTCTGCTGTCTCTGCAAGATTGGGGTCTCCGGTGGATGACCAAA  
 TAGCTATTGTCTCAAGGTGTTCAATCGGTACCTTGAGTTATGCGGAACTCCAGAAAA  
 CATAACAGGATGGAGCCAGCCGCGCAGCCAGGGAGTGTGGGTCTGGATGACTTCCAGTTTC  
 TGCCCTTCATCTGNGCAGTTCGCAGCTGATAGACCACCCATACCTGGAGCCAGACACT  
 TTGTGGATGAGAAGGCCGTNGATGAGAACCACANGACTACATNGTCTGGAGTGTATCCT  
 GTTTATACCGAGAGAAGACTGGCCATTTCAGACACTCCACCAGCTGGGAACATCAGCG  
 CGTCTTTCTGNTCCAAGTGAACAGC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_021131 unedited  
 AGCTTGGCCGCGCCGCATCTANAGTCGGTTTTTTTTTTTTTTTTTTTTTTTTTTTACAG  
 GGGCAAAACAGAGGCTTAACTGAACAGCAATGAGGGTGAAGGGGCTGGGAGCCATA  
 GGGGGATGGGGGAGCCAGGAAGGGGTGTCTGGCCCTGGGAGAGGTTGGACGCTGGGCT  
 CTTCTGAGAACTGTCACTGACCTTTGGGACTCCTGACCCAGCCTCTGCCAGACCATCA  
 CCGGATCCCAGGCTGAGCCCTGTGCTGTGCTTCTCAGTGTCCCCCTTCTGAAGGGTG  
 TGTGGACCAGACACAGGAGGGGCGAGTGGAGAAGGGCAGGCCTGGGGGACGAGCCTGTA  
 AGAGCCAGGCCAGGAACAGCCCTAGGAGAAACCTCGGCGGTGGCCCTCAATGGGCTGC  
 CCAGCCCCACTGGGCCATTCTGAGTGCCAAAGCCTGGGCTTGGGAGGCTGTCTTTAC  
 CTCACCTATAAAAGCAATGGACAGTTCAGGGAGGTGGGAGGACAAGGTGTGGGACTGCC  
 ACCTTCTGGGCCACCCATCACCCAGGGGAGCAGAGAAGCAGGGCCAGGGGCCAGGGT  
 GAGGCTCACAGCAGCGCAAAGGTAGCAGAAGTGCCGGGCCTAAGACTGCCAAGAGGAAT  
 CCAGCTCTCCAATACAATGGGCCCAAGCCCCCTCCTGATTTTTGGCCCTCCCTCCCTGCC  
 AGGAAAGTCTGGAAGACTGCCTACCCATATCTGGCCCTCCAGAGCCCGCCCTACCCAAG  
 GCGCTTATTGCTAGTACCCTAAGGACGGAGAATGGGGTACGCAGAAACCAAGCCAGGC  
 TTGAACTGANACCCGGGAGGTTGCACCGGCCTAGCCCGGCAGTGAAAGACCTGAGGG  
 CCACCCACTTAACGCCTCCC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_021131

**Insert Size:**

2550 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_021131.3, NP\\_066954.2](#)

**RefSeq Size:** 2666 bp

**RefSeq ORF:** 972 bp

**Locus ID:** 5524

**UniProt ID:** [Q15257](#)

**Cytogenetics:** 9q34.11

**Domains:** PTPA

**Protein Families:** Druggable Genome, Phosphatase

**Gene Summary:**

Protein phosphatase 2A is one of the four major Ser/Thr phosphatases and is implicated in the negative control of cell growth and division. Protein phosphatase 2A holoenzymes are heterotrimeric proteins composed of a structural subunit A, a catalytic subunit C, and a regulatory subunit B. The regulatory subunit is encoded by a diverse set of genes that have been grouped into the B/PR55, B'/PR61, and B''/PR72 families. These different regulatory subunits confer distinct enzymatic specificities and intracellular localizations to the holoenzyme. The product of this gene belongs to the B' family. This gene encodes a specific phosphotyrosyl phosphatase activator of the dimeric form of protein phosphatase 2A. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (3) differs in the 5' UTR and lacks an in-frame segment of the coding region, compared to variant 1. Variants 2 and 3 encode a shorter protein (isoform b), also known as isoform alpha, that is missing an internal segment compared to isoform a.