

## Product datasheet for **SC102658**

### PPP1R16A (NM\_032902) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPP1R16A (NM_032902) Human Untagged Clone
Tag:	Tag Free
Symbol:	PPP1R16A
Synonyms:	MYPT3
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC102658 sequence for NM\_032902 edited (data generated by NextGen Sequencing)

```

ATGGCCGAGCACCTGGAGCTGCTGGCAGAGATGCCCATGGTGGGCAGGATGAGCACACAG
GAGCGGCTGAAGCATGCCCAGAAGCGGCGGCCAGCAGGTGAAGATGTGGGCCAGGCT
GAGAAGGAGGCCAGGGCAAGAAGGGTCTGGGGAGCGTCCCCGGAAGGAGGCAGCCAGC
CAAGGGTCTCTGAAGCAGTCTCTTCCCTCCCAGTGTGTCTTCTGGAGGCCGCTGCC
CGAAATGACCTGGAAGAAGTCCGCCAGTTCCTTGGGAGTGGGGTCAGCCCTGACTTGCC
AACGAGGACGGCCTGACGGCCCTGCACCAAGTGTGCATTGATGATTTCCGAGAGATGGTG
CAGCAGCTCCTGGAGGCTGGGGCCAACATCAATGCCTGTGACAGTGAGTGTGGACGCCCT
CTGCATGCTGCGGCCACCTGCGGCCACCTGCACCTGGTGGAGCTGCTCATCGCCAGTGGC
GCCAATCTCTGGCGGTCAACACCGACGGGAACATGCCCTATGACCTGTGTGATGATGAG
CAGACGCTGGACTGCCTGGAGACTGCCATGGCCGACCGTGGCATCACCCAGGACAGCATC
GAGGCCGCCGGCCGTGCCAGAACTGCGCATGCTGGACGACATCCGGAGCCGGTGCAG
GCCGGGGCAGACCTCCATGCCCCCTGGACCACGGGGCCACGCTGCTGCACGTGCAGCC
GCCAACGGGTTACGCGAGGCGGCTGCCCTGCTGCTGGAACACCGCCAGCCTGAGCGCT
AAGGACCAAGACGGCTGGGAGCCGCTGCACGCCGCGGCTACTGGGGCCAGGTGCCCTG
GTGGAGCTGCTCGTGGGCACGGGGCCGACCTGAACGCAAAGTCCCTGATGGACGAGACG
CCCCTTGATGTGTGCGGGGACGAGGAGGTGCGGGCCAAGTGTGAGGCTGAAGCACAAG
CACGACGCCCTCTGCGCGCCAGAGCCGCCAGCGCTCCTTGCTGCGCCGCCACCTCC
AGCGCCGGCAGCCGCGGGAAGGTGGTGAAGCGGGTGAAGCTAACCAGCGCACCGACCTG
TACCGAAGCAGCACGCCAGGAGGCCATCGTGTGGCAACAGCCGCCGCCACCAGCCCG
GAGCCGCCGAGGACAACGATGACCGCCAGACAGGCGCAGAGCTCAGGCCGCCGCCCGCC
GAGGAGGACAACCCGAAGTGGTCAAGCCGACAATGGCCGAGTAGGGGGCTCCCCAGT
CGGCATCTATACTCCAAGCGACTAGACCGGAGTGTCTCCTACCAGCTGAGCCCCCTGGAC
AGCACCCACCCACACCTGGTCCACGACAAGGCCACCCACACCTGGTGACCTGAAG
CGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCACCTGAGGGGCCGAGAGCCCTGAG
ACAGCTGAGCCTGGCCTGCCTGGTACACGGTACCCCCAGCCTGACTGTGGCTTACAGG
GCAGGGGGGACCCACCCCTGCTCAAGCTCACAGCCCCGGCGGTGGAGGCTCCCGTGGAG
AGGAGGCCGTGCTGCCTGCTCATGTGA
    
```

Clone variation with respect to NM\_032902.5

**5' Read Nucleotide Sequence:**

```

>OriGene 5' read for NM_032902 unedited
ACATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTGAGGCCGG
CCAGGTCTCGGGGCTGCCTCCATAGGTTGTGCACCCTGACCCCGAGAGGGAGGGCAGGC
GCTGCTTGTGACAGCTAGAGGCTGGCCTGGGGAGCAGGTTTGGGGTGCCTCCACACT
GCCCTCCCTGCCCGCCATGCCCCCAAGGGCTGCCTGGGCTGTTATTGTGTGGGGC
CTCCTGACCCAGCCAAGGGCACGAAGCTCTGGGAAGGGGATGCCCCGAGGGTGCCAGTC
CAGCTAGCTGCCCAACCCTCAGGCCAGCCTGGCCCCAAGCTCCCACTCTGGTGCCC
CGAGCAGCCCTGTGGCAAGCAGCCGCCCATGGCCGAGCACCTGGAGCTGCTGGCAGA
GATGCCCATGGTGGGCAGGATGAGCACACAGGAGCGGCTGAAGCATGCCAGAAGCGGGC
CGCCAGCAGGTGAAGATGTGGGCCAGGCTGAGAAGGAGGCCAGGGCAAGAAGGGTCC
TGGGGAGCGTCCCGGAAGGAGGCAGCCAGCCAAGGGCTCTGAAGCAGGTCTCTTCCC
TCCAGTGTGTCTTCTGGAGGCCGCTGCCGAAATGACCTGNAAGAAGTCCGCCAGTT
CCTTGGGAGTGGGGTCAAGCCTGACTTGGCCAACGAGGACGGCTGACGGCCCTGCACCA
GTGCTGCATTGATGATTTCCGAGAGAGGTGCAGCAGCTCCTGGAGGCTGGNGCCAACATC
AATGCCTGTGACAGTGAGTGTGGACGCCCTGTCATGCTGCGGNACCTGCNGNCCTGC
ACCTGGTGGAGCTGCTATCGCCAGTGGCGCCATCTCCTGGCGGGTACACGACGGAACAT
GCCCTATGACTGTGGGAGATGAACAAANCCTNACTGCCTGNAGACTGCTGGCCGACCGT
GC
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_032902 unedited NTTTTCTCTGNNACCGCGGCCGAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTCATGGC AAAACAGCCCTTTATCAAGAGTTGCAGGATAAAAAATAGTCTTTGCAGCCAGACATCCCTC CAGGCATGTCTTCTGACCTGAGAGGGGCCAGTGTCTGTACAGTAAAAGCCGGGGTTTCC GTGCTGCACCCGAGCACCAGGGCACGCACCGTGGGGAGGCAGCCTTGGGCTGTGCCCGC GACAGGGCCCTGCATGCTGAGCAACAGCCTCACATGAGCAGGCAGCACGGCCTCCTCTC CACGGGAGCCTCCACCGCCGGGCTGTGAGCTTGTGAGCAGGGGTGGTCCCCGCCTGCCCT GAAGCCACAGTCAGGCTGGGGGTCAACCGTGTACCAGGCAGCCAGGCTCAGCTGTCTC AGGGCTCTCGGGCCCTCAGGTGGGGTTCGCTGCAGCTTGGCAGCAGCTCGCTGGCGCTT CAGGTCAGCCAGGGTGTGGTGGCCTTGTCTGGACCAGGGTGTGGGGGTGGTGTCTGTC CAGGGGGCTCACCTGGTAGGAGACTCCGGTCTAGTCGCTTGGAGTATAGATGCCGCAC TGGGGAGCCCCCTACTCGCCATTGTGCGGCTGACCACTTGGGGTTGTCTCTCCGG GGGCGCGGCCTGAGCTCTGCGCCTTGTGGCGCCATCGTTGCCCTCGCGGTTCCGGG CTGGTGGCCCGCTGGTGCCACACAAGGTCTCCTGGCGTGTGTTTGCCTCCAGTCCGG GCCTGGTTAAGCTACCGCTTACCACTTCCCTGTTGCCGCTGGAAGGTCGCGCCCTC GATACCTGTCCCTGGCCCAAGAGGCTCCTTTCTTTTCACTCCCACTTTGTCCCCT TTTTCCCCTCTT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_032902
<b>Insert Size:</b>	2190 bp
<b>OTI Disclaimer:</b>	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>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>	<u><a href="#">NM_032902.5</a></u> , <u><a href="#">NP_116291.1</a></u>
<b>RefSeq Size:</b>	2326 bp
<b>RefSeq ORF:</b>	1587 bp
<b>Locus ID:</b>	84988
<b>UniProt ID:</b>	<u><a href="#">Q96I34</a></u>
<b>Cytogenetics:</b>	8q24.3
<b>Domains:</b>	ANK

**Gene Summary:**

Myosin light chain kinase and phosphatase (MLCP) complexes control the phosphorylation states of regulatory myosin light chains, which is crucial for muscle and intracellular movement. MLCPs typically contain a catalytic protein phosphatase 1 (PP1c) subunit, a myosin phosphatase targeting (MYPT) subunit, and another smaller subunit. The protein encoded by this gene represents an MYPT subunit, which is responsible for directing PP1c to its intended targets. However, while the phosphorylation of other MYPT members results in PP1c inactivation, phosphorylation of the encoded protein by protein kinase A results in PP1c activation. [provided by RefSeq, Jan 2020]

Transcript Variant: This variant (1) represents the longest transcript. All five variants encode the same protein.