

Product datasheet for SC328849

OriGene Technologies, Inc.

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Myosin Phosphatase 2 (PPP1R12B) (NM_001167857) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Myosin Phosphatase 2 (PPP1R12B) (NM_001167857) Human Untagged Clone

Tag: Tag Free
Symbol: PPP1R12B

Synonyms: MYPT2; PP1bp55

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)



Fully Sequenced ORF:

>NCBI ORF sequence for NM_001167857, the custom clone sequence may differ by one or more nucleotides

ATGGCGGAACTGGAGCACCTAGGAGGGAAGCGGGCAGAGTCGGCGGAATGCGGCGGGCA GAGCAGCTTCGGCGCGGGGCTCGCTGACAGAGCAGGAGCCTGCGGAGCGACGAGGC GCGGGGCGCAGCCGCTGACCAGGCGCGGGAGCCCCAGGGTCCGCTTCGAGGACGGTGCT GTCTTTCTGGCCGCCTGCTCTAGCGGGGACACCGACGAGGTGAGAAAGCTTCTGGCAAGA GGTGCTGATATCAACACGGTCAACGTGGACGGCTTGACAGCCCTGCACCAGGCATGTATT GATGAAAATTTGGACATGGTGAAGTTTCTGGTGGAGAACAGAGCCAATGTAAACCAGCAA GACAACGAGGGCTGGACACCCCTTCATGCAGCAGCTTCCTGTGGCTATCTCAACATAGCA GAGTATTTCATTAATCACGGAGCCAGTGTAGGTATTGTCAATAGTGAAGGTGAAGTTCCC TCTGACCTTGCAGAAGAGCCAGCCATGAAGGATCTTCTTCTGGAGCAAGTAAAGAAGCAA GGAGTTGATCTAGAGCAGTCAAGAAAAGAAGAAGAAGAGCAGCAGATGTTGCAGGATGCCCGC CTTCATGTGGCTGCCAAGGGCTACTCTGAAGTCCTCAGACTTTTAATTCAGGCTGGC TATGAACTCAATGTTCAGGATTATGATGGCTGGACTCCCCTCCATGCTGCACACTGG GGAGTGAAGGAGGCTTGCTCCATCCTGGCAGAAGCACTTTGTGACATGGATATTCGAAAT AAACTGGGCCAGACACCATTTGATGTGGCTGATGAGGGTCTCGTGGAGCATTTGGAGTTG CTCCAGAAGAAGCAGAATGTGCTTCGAAGTGAAAAGGAGACACGGAATAAACTCATTGAG TCAGATCTGAACAGCAAGATTCAGAGTGGGTTCTTTAAGAACAAAGAGAAGATGCTCTAT GAGGAGGAGACACCTAAGTCCCAAGAAATGGAGGAAGAAAATAAAGAATCTAGTAGCTCC AGCTCAGAGGAGGAGGAAGGTGAAGATGAAGCTTCTGAGTCAGAAACTGAGAAGGAGGCA GATAAAAAGCCAGAAGCCTTTGTCAATCATTCCAACTCTGAAAGCAAGAGTAGTATCACA GAGCAGATACCAGCACCAGCTCAAAATACCTTCTCTGCCTCTTCTGCTAGGAGGTTCTCT TCTGGCCTTTTTAACAAGCCAGAAGAGCCCAAAGATGAATCTCCTTCTTCATGGAGATTG GGACTGAGAAAAACTGGCAGCCACAACATGCTGAGTGAGGTGGCCAATTCCAGGGAACCT ATAAGGGACCGAGGCTCTTCCATCTATCGCTCCTCTTCAAGCCCTCGGATTTCTGCTCTA CTGGACAACAAGATAAGGTGCAGTTTGGGAGGGTATGGGGGAATTCCAAGGCAGTTTTT TTTTTCCATGAAAATTCAATCTTAGGAACAAATGAAAATATTTTCTAG

Restriction Sites: Please inquire ACCN: NM_001167857

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: <u>NM 001167857.1</u>, <u>NP 001161329.1</u>

 RefSeq Size:
 1898 bp

 RefSeq ORF:
 1548 bp

 Locus ID:
 4660

 UniProt ID:
 060237

 Cytogenetics:
 1q32.1

Protein Families: Druggable Genome

Protein Pathways: Vascular smooth muscle contraction

Gene Summary: Myosin phosphatase is a protein complex comprised of three subunits: a catalytic subunit

(PP1c-delta, protein phosphatase 1, catalytic subunit delta), a large regulatory subunit (MYPT, myosin phosphatase target) and small regulatory subunit (sm-M20). Two isoforms of MYPT have been isolated--MYPT1 and MYPT2, the first of which is widely expressed, and the second of which may be specific to heart, skeletal muscle, and brain. Each of the MYPT isoforms functions to bind PP1c-delta and increase phosphatase activity. This locus encodes both MYTP2 and M20. Alternatively spliced transcript variants encoding different isoforms have been identified. Related pseudogenes have been defined on the Y chromosome. [provided by

RefSeq, Oct 2011]

Transcript Variant: This variant (5) differs in the 3' coding region and 3' UTR, compared to

variant 8. The resulting isoform (e) is shorter than isoform h.