

## Product datasheet for **SC307341**

### PPP2R2B (NM\_181676) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | PPP2R2B (NM_181676) Human Untagged Clone  |
| Tag:                      | Tag Free  |
| Symbol:                   | PPP2R2B   |
| Synonyms:                 | B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B; PR55-BETA; PR55BETA; SCA12 |
| 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\_181676 edited  
 GCAAACTCTGCTCAGAGGAGCTTCAGCCAATGAAGAGGCTATATCCCGGCTTGCTTGGGG  
 GCTTCTGAGTTTGTAGCTGCATGCAGAAATGTAAGGCAGTGCTTCTGGCGCTGATGGCAA  
 AATGGGACCCATCTCCAGTTATTCCTCGGGCACCCAGCTTTGCAAACTGGGAAAGAAC  
 CTACATAAACATATTGGTGATGTAGCCAGCTTAAAAGGCCGAGAGAATCCTTATGGATT  
 AGGAGACTGTTTTTTATTTAGATTTTTATTTTTATTTTGAAGATGAAATGCTTCTCTC  
 GTTACCTGCCTTACATCTCAGACCTCGAACACCATCCTTTCTCCAGCTGCCACACAG  
 AAGCTGACATTATCTCTACGGTAGAATTC AACACACGGGAGAATTA CTAGCGACAGGGG  
 ACAAGGGGGTTCGGGTTGTAATATTTCAACGAGAGCAGGAGAGTAAAAATCAGGTTTCATC  
 GTAGGGGTGAATACAATGTTTACAGCACATTCCAGAGCCATGAACCCGAGTTTCGATTACC  
 TGAAGAGTTTAGAAATAGAAGAAAAATCAATAAAATAAGATGGCTCCCCAGCAGAATG  
 CAGCTTACTTTCTGTCTACTAATGATAAACTGTGAAGCTGTGAAAGTCAGCGAGC  
 GTGATAAGAGGCCAGAAGGCTACAATCTGAAAGATGAGGAGGGCCGGCTCCGGGATCCTG  
 CCACCATACAACCTGCGGGTGCCTGCTGAGACCCATGGACCTGATGGTGGAGGCCA  
 CCCACGAAGAGTATTTGCCAACGCACACACATATCACATCAACTCCATATCTGTCAACA  
 GCGACTATGAAACCTACATGTCCGCTGATGACCTGAGGATTAACCTATGGAACCTTGAAA  
 TAACCAATCAAAGTTTTAATATTGTGGACATTAAGCCAGCCAACATGGAGGAGCTCACGG  
 AGGTGATCACAGCAGCCGAGTTCCACCCCATCATTGCAACACCTTCGTGTACAGCAGCA  
 GCAAAGGGACAATCCGGCTGTGTGACATGCGGGCATCTGCCCTGTGTGACAGGCACACCA  
 AATTTTTTGAAGAGCCGGAAGATCCAAGCAACAGATCATTTTTCTCTGAAATTATCTCTT  
 CGATTTCCGGATGTGAAGTTCAGCCACAGTGGGAGGTATATCATGACCAGGGACTACTTGA  
 CCGTCAAAGTCTGGGATCTCAACATGGAAAACCGCCCATCGAGACTTACCAGGTTTCATG  
 ACTACCTCCGACGAAGCTGTGTTCCCTCTATGAAAATGACTGCATTTTTGATAAATTTG  
 AGTGTGTGTGGAATGGGTCAGACAGTGTATCATGACAGGCTCCTACAACAACCTTCTTCA  
 GGATGTTTCGACAGAAACCAAGCGTGATGTGACCCTTGAGGCTTCGAGGAAAAACAGCA  
 AGCCCCGGGCTATCCTCAAACCCGAAAAGTGTGTGTTGGGGGGCAAGCGGAGAAAAGACG  
 AGATCAGTGTGACAGTCTGGACTTTAGCAAAAAGATCTTGATACAGCTTGGCATCCTT  
 CAGAAAATATTATAGCAGTGGCGGCTACAATAACCTATATATATCCAGGACAAGGTTA  
 ACTAGGTGGACAAGTTATTACTTAATAATCTCACATACTGAATACTAGTCAAACAAGTTT  
 TTAATGTTTCTTTGGGCTTCATTTGATGCATTGACTTTAATTTCCCTATACAGGAAAT  
 GATTGGAATAGAAATTAAGGAGTCCAACATCCAGCTCCCCAGTTCTAAGAACTTTT  
 GTCAAACCAATAGGTTTGGGACTTCTGTTTAGAATTGAAAGCTGCCAGCTAACAGTA  
 ATTCTTCCATAGTTGACTTGAACCTTCTGATGCTTTTATTGCCAGTTTTCTCTGGTGGGT  
 CCAGTGTTTTGTCTAGGTGTCTGCTGCGATAAAATGAGGTTGTCTGTAGTATTTAAGG  
 AGAAAAGAGATAAGTTTTTTTTAATTAAGCAATCCATTTGATTGAAAAAATCAACAAA  
 AAATAACACCGTTTACTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_181676

**Insert Size:** 2100 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.

|                               |   |
|-------------------------------|---|
| <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_181676.1</a></u> , <u><a href="#">NP_858062.1</a></u>   |
| <b>RefSeq Size:</b>           | 1978 bp   |
| <b>RefSeq ORF:</b>            | 1341 bp   |
| <b>Locus ID:</b>              | 5521  |
| <b>UniProt ID:</b>            | <u><a href="#">Q00005</a></u>   |
| <b>Cytogenetics:</b>          | 5q32  |
| <b>Protein Families:</b>      | Druggable Genome, Phosphatase   |
| <b>Protein Pathways:</b>      | Tight junction  |
| <b>Gene Summary:</b>          | <p>The product of this gene belongs to the phosphatase 2 regulatory subunit B family. Protein phosphatase 2 is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant regulatory subunit, that associates with a variety of regulatory subunits. The B regulatory subunit might modulate substrate selectivity and catalytic activity. This gene encodes a beta isoform of the regulatory subunit B55 subfamily. Defects in this gene cause autosomal dominant spinocerebellar ataxia 12 (SCA12), a disease caused by degeneration of the cerebellum, sometimes involving the brainstem and spinal cord, and in resulting in poor coordination of speech and body movements. Multiple alternatively spliced variants, which encode different isoforms, have been identified for this gene. The 5' UTR of some of these variants includes a CAG trinucleotide repeat sequence (7-28 copies) that can be expanded to 55-78 copies in cases of SCA12. [provided by RefSeq, Jul 2016]</p> <p>Transcript Variant: This variant (4) differs in the 5' UTR and the 5' coding region, compared to variant 3. The resulting isoform (b) is shorter and has a distinct N-terminus, compared to isoform e.</p> |