

## Product datasheet for **SC331012**

### PPP2R2B (NM\_001271948) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PPP2R2B (NM\_001271948) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** PPP2R2B  
**Synonyms:** B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B; PR55-BETA; PR55BETA; SCA12  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC331012 representing NM\_001271948.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

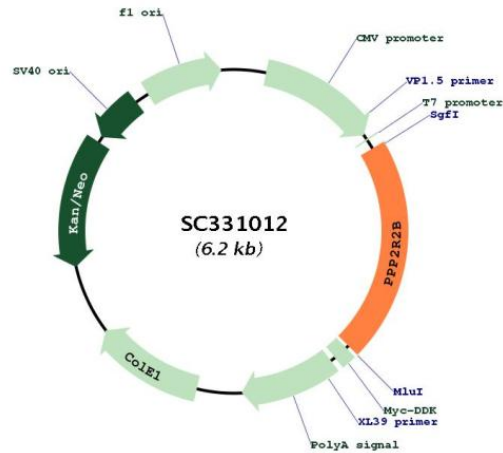
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ATGAATTATCCAGATGAAAAACCTATGGAATAAAGCTGACATTATCTCTACGGTAGAATTCAACCAC
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AAAAATCAGGTTTCATCGTAGGGGTGAATACAATGTTTACAGCACATTCAGAGCCATGAACCCGAGTTC
GATTACCTGAAGAGTTTAGAAAATAGAAGAAAAATCAATAAAAATAAGATGGCTCCCCAGCAGAATGCA
GCTTACTTTCTTGTCTACTAATGATAAACTGTGAAGCTGTGGAAAGTCAGCGAGCGTGATAAGAGG
CCAGAAGGCTACAATCTGAAAGATGAGGAGGGCCGGCTCCGGGATCCTGCCACCATCACAACTGCGG
GTGCCCTGTCTGAGACCCATGGACCTGATGGTGGAGGCCACCCACGAAGAGATTTGCCAACGCACAC
ACATATCATCACTCACTCATATCTGTCAACAGCGACTATGAAACCTACATGTCCGCTGATGACCTGAGG
ATTAACCTATGGAACCTTTGAAATAACCAATCAAAGTTTTAATATTGTGGACATTAAGCCAGCCAACATG
GAGGAGCTCACGGAGGTGATCACAGCAGCCGAGTTCACCCCATCATTGCAACACCTTCGTGTACAGC
AGCAGCAAAGGGACAATCCGGCTGTGTGACATGCGGGCATCTGCCTGTGTGACAGGCACACCAATTT
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GAAAATGACTGCATTTTTGATAAATTTGAGTGTGTGTGGAATGGGTCAGACAGTGTATCATGACAGGC
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GAAAACAGCAAGCCCGGGCTATCCTCAAACCCGAAAAGTGTGTGTGGGGGCAAGCGGAGAAAAGAC
GAGATCAGTGTGACAGTCTGGACTTTAGCAAAAAGATCTTGCATACAGCTTGGCATCCTTCAGAAAAT
ATTATAGCAGTGGCGGCTACAAATAACCTATATATATTCCAGGACAAGGTTAACTAG
  
```

**Restriction Sites:** Sgfl-Mlul



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**Plasmid Map:**


**ACCN:** NM\_001271948

**Insert Size:** 1299 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).

**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\\_001271948.1](#)

**RefSeq Size:** 2578 bp

**RefSeq ORF:** 1299 bp

**Locus ID:** 5521

UniProt ID: [Q00005](#)

Cytogenetics: 5q32

Protein Families: Druggable Genome, Phosphatase

Protein Pathways: Tight junction

MW: 50.4 kDa

**Gene Summary:** 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]

Transcript Variant: This variant (10) has an additional segment and an additional exon in the 5' region, and initiates translation at an alternate downstream start codon, compared to variant 3. The resulting isoform (d) is shorter and has a distinct N-terminus, compared to isoform e. Variants 6 and 10 encode the same isoform d.