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Product datasheet for SC117287

PPP2R2B (NM_004576) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R2B (NM_004576) Human Untagged Clone
Tag:	Tag Free
Symbol:	PPP2R2B
Synonyms:	B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC117287 sequence for NM_004576 edited (data generated by NextGen Sequencing)

ATGGAGGAGGACATTGATACCCGCAAAATCAACAACAGTTTCCTGCGCGACCACAGCTAT
GCGACCGAAGCTGACATTATCTCTACGGTAGAATTCAACCACACGGGAGAATTACTAGCG
ACAGGGGACAAGGGGGGTCGGGTTGTAATATTTCAACGAGAGCAGGAGAGTAAAAATCAG
GTTCATCGTAGGGGTGAATACAATGTTTACAGCACATTCCAGAGCCATGAACCCGAGTTC
GATTACCTGAAGAGTTTAGAAATAGAAGAAAAAATCAATAAAATAAGATGGCTCCCCCAG
CAGAATGCAGCTTACTTTCTTCTGTCTACTAATGATAAAACTGTGAAGCTGTGGAAAGTC
AGCGAGCGTGATAAGAGGCCAGAAGGCTACAATCTGAAAGATGAGGAGGGCCGGCTCCGG
GATCCTGCCACCATCACAACCCTGCGGGTGCCTGTCCTGAGACCCATGGACCTGATGGTG
GAGGCCACCCCACGAAGAGTATTTGCCAACGCACACACATATCACATCAACTCCATATCT
GTCAACAGCGACTATGAAACCTACATGTCCGCTGATGACCTGAGGATTAACCTATGGAAC
TTTGAAATAACCAATCAAAGTTTTAATATTGTGGACATTAAGCCAGCCAACATGGAGGAG
CTCACGGAGGTGATCACAGCAGCCGAGTTCCACCCCCATCATTGCAACACCTTCGTGTAC
AGCAGCAGCAAAGGGACAATCCGGCTGTGTGACATGCGGGCATCTGCCCTGTGTGACAGG
CACACCAAATTTTTTGAAGAGCCGGAAGATCCAAGCAACAGATCATTTTTCTCTGAAATT
ATCTCTTCGATTTCGGATGTGAAGTTCAGCCACAGTGGGAGGTATATCATGACCAGGGAC
TACTTGACCGTCAAAGTCTGGGATCTCAACATGGAAAACCGCCCCATCGAGACTTACCAG
GTTCATGACTACCTCCGCAGCAAGCTGTGTTCCCTCTATGAAAATGACTGCATTTTTGAT
AAATTTGAGTGTGTGTGGAATGGGTCAGACAGTGTCATCATGACAGGCTCCTACAACAAC
TTCTTCAGGATGTTCGACAGAAACACCAAGCGTGATGTGACCCTTGAGGCTTCGAGGGAA
AACAGCAAGCCCCGGGCTATCCTCAAACCCCGAAAAGTGTGTGTGGGGGGCAAGCGGAGA
AAAGACGAGATCAGTGTCGACAGTCTGGACTTTAGCAAAAAGATCTTGCATACAGCTTGG
CATCCTTCAGAAAATATTATAGCAGTGGCGGCTACAAATAACCTATATATATTCCAGGAC
AAGGTTAACTAG

Clone variation with respect to NM_004576.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004576 unedited

GTTCGAATTTTGTAATACGACTCACTATAGGGCGGCCCGCGAATTCGCACGAGGCGGCCA
GGCAAGCCTGAATCCTGTCCCTGCCATCTCGCCACTGCAGCTCGGGTCCAGAAAGGCACC
ATTTTGTCGCGGCTGCCCGCTCTCCCAGGGGGAGGAGGGATCTTTTTTGCATTTTGGAGC
GGCTGCCAAGGAGGGGAACCTGTTGGGCATCTCCCCAGACCCGCTTGTGAGCGCCTCCGG
GGCGGGCGGGCGGGACCAGACCCCTCGGGGCACGGCGTATCTTGGCACCCGGAGGCAGCG
GAGGCAGGCGCAGCATCCTCGCTGGGAACTGGAGCTGGAGTGAGCGCACCGCGCGGGAGG
AGCCGCCGCAGCCTCGCAGAACCCGAGTGGAGGAGGTGACAGCTCCATTGCCGGGTTTTT
ATTTTTTTTCTCTCCGCCTCCCCGTCTCCTCCTCAGGCTCGGACCATGGTGCAGTCCCAC
TGGCTCCCCTGCCCCCCTCTCCTGTGAGACTGGCTGCGGGGAGGGATCATGGATACTTGT
CTGCCGGCTTCTGGTTCCCACGCAAGTAAGCCTGCTGTCAATGGAGGAGGACATTGATAC
CCGCAAAATCAACAACAGTTTCCTGCGCGACCACAGCTATGCGACCGAAGCTGACATTAT
CTCTACGGTAGAATTCAACCACACGGGAGAATTACTAGCGACAGGGGACAAGGNNGGGTC
GGGTTGTAATATTTCAACGAGAGCAGGAGAGTAAAAATCAGGTTCATCGNTAGGGTGAAT
ACCATGGTTACAGCACATTCCAGAGCCATGAACCCGAGTTCGATTACCTGNAGAGTTTAG
AAATAGAAGAANAAATCCATANNATAGATGGCTCCCCAGCAGATGCAGNNCTACTTCTTC
TGTCTACTAATGATAAACTGTGAAGCTGTGGAAAGTCA

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_004576 unedited
TAACGGTGTTTATTCTTTGTTTGATTTTTTCATCAAATGGATTGCTTAATTAAAAAAAAC
TTATCTCTTTTCTCCTTAAATACTACAGACAACCTCATTTTATCGCAGCAGACACCTAGG
AACAAAACACTGGACCCACCAGAGAAAACTGGGCAATAAAAGCATCAGAAGTTCAAGTCA
ACTATGGAAGAATTACTGTTAGCTGGCAGCTTTCAATTCTAAACAGAAGTGTCCCAAACC
TATTGNGTTTGACAAAAGTTTCTTAGAACTGGGGAGCCTGGGAATGTTGGACTCCTTTTA
ATTCTATTCCCAATATTTCCTGTTTAGGGAAATTAAAGTCATTGCTTCAAATGGAGAACC
CCAAGAAACATTAAAAAACTTGGTTTGACTAAGTTTTCAGTTTGGGAGAATAATTAAGGA
ATAAACTTGGTCCCACTCATTTAAACCTGGGCCTGGAAATTTTATAAGGGTATTTTGAGA
CCGCCCCTGGTTTAAAATTTTCTCTAAAGGGGTCCCAATCTTTTTGCCAAAACTTTTTTG
TTTAAATCAAAAAGTGGGGAAACTGAGCTTCGTCTTTCTCCCCGTTGCCCCCCCCCACAC
CTTTTGGGGCTTAGGGGATTCCCCGCGGTCTGGGTGTTTCCCTGTTAGACTCAGGGCGGC
CAAAAGACCCTGGGGGTTCTTCCTTCACATTCCCCAATAAACTGTGGCAGGAGACCGTTT
TTTGTTAACATCGGTTGTGGCCGTTCGTTCCAGCACTCTCCATTTTTATAAATAGGGTGC
TCCTTTCTTCTTTATAGCAGAAATACCAATCCTTTCTCGGTGGCGGCGGCTCCATATTTC
ACCTTCATCCCGCCTTTCGGAGCTGCGGCGTTCCCGCTCCTGTACCCACCACACACCATC
CACTGGGTGAACACCAATTTTTTCGCTCCACACGCGCCCACTTTCCGTGGCGGTTCGCGT
CCTTTCCGTGTTTTCCGCGCAGCCGTACTTCACACACTATACACNCCGCGCGCGCCCGGC
GCGCCGTCCATATTGAAACAAATAATCATTCGCATTTACCCCAAGTTTACCCT
```

Restriction Sites: NotI-NotI

ACCN: NM_004576

Insert Size: 2340 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_004576.2, NP_004567.1

RefSeq Size: 2300 bp

RefSeq ORF: 1332 bp

Locus ID: 5521

Cytogenetics: 5q32

Domains: WD40

Protein Families: Druggable Genome, Phosphatase

Protein Pathways: Tight junction

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 (1) encodes isoform a. Transcript variants 1, 2, 3 and 7 encode the same isoform.