

Product datasheet for **RC232870**

PPP2R2B (NM_001271900) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R2B (NM_001271900) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPP2R2B
Synonyms:	B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B; PR55-BETA; PR55BETA; SCA12
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC232870 representing NM_001271900
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGCTTCAGCCAAGTAAAGGCACTATCGAGATTGGAACCACAGAAGGCTCGGACCATGGTGCAGTC
 CCACTGGCTCCCCTGCCCCCTCTCCTGTGAGACTGGCTGCGGGGAGGGATCATGGATACTTGTCTGCCG
 GCTTCTGGTTCCACGCAAGTAAGCCTGCTGTCAATGGAGGAGGACATTGATACCCGCAAAATCAACAAC
 AGTTTCTGCGCGACCACAGCTATGCGACCGAAGCTGACATTATCTCTACGGTAGAATTC AACACACCGG
 GAGAATTACTAGCGACAGGGGACAAGGGGGTTCGGGTTGTAATTTTCAACGAGAGCAGGAGAGTAAAA
 TCAGGTTTCATCGTAGGGTGAATACAATGTTTACAGCACATTCCAGAGCCATGAACCCGAGTTCGATTAC
 CTGAAGAGTTTAGAAATAGAAGAAAAATCAATAAAATAAGATGGCTCCCCAGCAGAATGCAGCTTACT
 TTCTTCTGTCTACTAATGATAAACTGTGAAGCTGTGAAAGTCAGCGAGCGTGATAAGAGGCCAGAAGG
 CTACAATCTGAAAGATGAGGAGGGCCGGCTCCGGGATCCTGCCACCATCACACCCTGCGGGTGCCTGTC
 CTGAGACCCATGGACCTGATGGTGGAGGCCACCCACGAAGAGTATTTGCCAACGCACACACATATCACA
 TCAACTCCATATCTGTCAACAGCGACTATGAAACCTACATGTCCGCTGATGACCTGAGGATTAACCTATG
 GAACCTTGAATAACCAATCAAAGTTTTAATTTGTGGACATTAAGCCAGCCAACATGGAGGAGCTCACG
 GAGGTGATCACAGCAGCCGAGTTCACCCCATCATTGCAACACCTTCGTGTACAGCAGCAGCAAAGGGA
 CAATCCGGCTGTGTGACATGCGGGCATCTGCCCTGTGTGACAGGCACACCAAATTTTTGAAGAGCCGGA
 AGATCCAAGCAACAGATCATTTTTCTCTGAAATATCTCTTCGATTTCCGATGTGAAGTTCAGCCACAGT
 GGGAGGTATATCATGACCAGGACTACTTGACCGTCAAAGTCTGGGATCTCAACATGGAAAACCGCCCA
 TCGAGACTTACCAGGTTTCATGACTACCTCCGACGAAGCTGTGTCCCTCTATGAAAATGACTGATTTT
 TGATAAATTTGAGTGTGTGGAATGGTCCAGACAGTGTATCATGACAGGCTCCTACAACAACCTCTTC
 AGGATGTTTCGACAGAAACCAAGCGTGTGTGACCCCTGAGGCTTCGAGGAAAAACAGCAAGCCCGGG
 CTATCCTCAAACCCGAAAAGTGTGTGGGGGCAAGCGGAGAAAAGACGAGATCAGTGTGACAGTCT
 GGACTTTAGCAAAAAGATCTTGATACAGCTTGGCATCCTCAGAAAATATTATAGCAGTGGCGCTACA
 AATAACCTATATATTTCCAGGACAAGTTAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC232870 representing NM_001271900
 Red=Cloning site Green=Tags(s)

MVLQPSEHYRDWNHRRLLGPWCSPTGSPAPLSCETGCGEGSWILVCRLLVPTQVSLLSMEEDIDTRKINN
 SFLRDHSYATEADIISTVEFNHTGELLATGDKGGRVVFQREQESKNQVHRRGEYNYVSTFQSHPEFDY
 LKSLIEIEEKINKIRWLPQQNAAYFLLSTNDKTVKLVKVSERDKRPEGYNLKDDEGRLRDPATITTLRVPV
 LRPMDLMVEATPRRVFANAHTYHINSISVNSDYETYMSADDLRINLWNFEITNQSFNIVDIKPANMEELT
 EVITAAEFHPHCNTFVYSSSKGTIKRLCDMRASALCDRHTKFFEEPDPNSRFFSEIISISDVKFSHS
 GRYIMTRDYLTVKVDLNMENRPIETYQVHDYLRSLKLSLYENDCIFDKFECVWNGSDSVIMTGSYNFF
 RMFDRNTKRDVTLASRENSKPRAILKPRKVCVGGKRRKDEISVDSLDFSKKILHTAWHPSENIIVAAT
 NNLYIFQDKVN

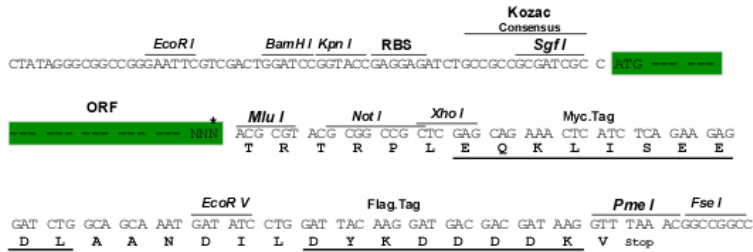
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

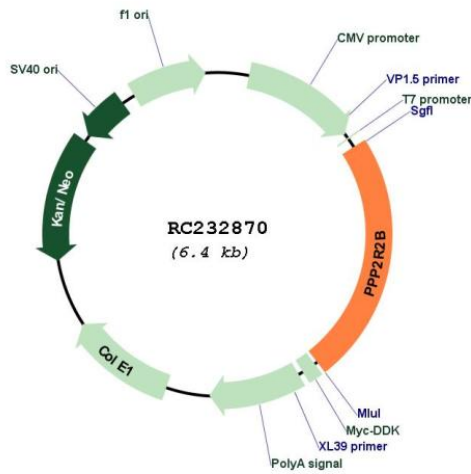
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001271900
ORF Size:	1503 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	<ol style="list-style-type: none">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_001271900.2
RefSeq Size:	2245 bp
RefSeq ORF:	1506 bp
Locus ID:	5521
UniProt ID:	Q00005
Cytogenetics:	5q32
Protein Families:	Druggable Genome, Phosphatase
Protein Pathways:	Tight junction
MW:	58.6 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]