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Product datasheet for RG232711

PPP2R2B (NM_001271948) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R2B (NM_001271948) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPP2R2B
Synonyms:	B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B; PR55-BETA; PR55BETA; SCA12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG232711 representing NM_001271948
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATTATCCAGATGAAAACACCTATGGAAATAAAGCTGACATTATCTCTACGGTAGAATTCAACCACA
CGGGAGAATTACTAGCGACAGGGGACAAGGGGGGTCGGGTTGTAATATTTCAACGAGAGCAGGAGAGTAA
AAATCAGGTTCATCGTAGGGGTGAATACAATGTTTACAGCACATTCCAGAGCCATGAACCCGAGTTCGAT
TACCTGAAGAGTTTAGAAATAGAAGAAAAAATCAATAAAATAAGATGGCTCCCCCAGCAGAATGCAGCTT
ACTTTCTTCTGTCTACTAATGATAAAACTGTGAAGCTGTGGAAAGTCAGCGAGCGTGATAAGAGGCCAGA
AGGCTACAATCTGAAAGATGAGGAGGGCCGGCTCCGGGATCCTGCCACCATCACAACCCTGCGGGTGCCT
GTCCTGAGACCCATGGACCTGATGGTGGAGGCCACCCCACGAAGAGTATTTGCCAACGCACACACATATC
ACATCAACTCCATATCTGTCAACAGCGACTATGAAACCTACATGTCCGCTGATGACCTGAGGATTAACCT
ATGGAACTTTGAAATAACCAATCAAAGTTTTAATATTGTGGACATTAAGCCAGCCAACATGGAGGAGCTC
ACGGAGGTGATCACAGCAGCCGAGTTCCACCCCCATCATTGCAACACCTTCGTGTACAGCAGCAGCAAAG
GGACAATCCGGCTGTGTGACATGCGGGCATCTGCCCTGTGTGACAGGCACACCAAATTTTTTGAAGAGCC
GGAAGATCCAAGCAACAGATCATTTTTCTCTGAAATTATCTCTTCGATTTCGGATGTGAAGTTCAGCCAC
AGTGGGAGGTATATCATGACCAGGGACTACTTGACCGTCAAAGTCTGGGATCTCAACATGGAAAACCGCC
CCATCGAGACTTACCAGGTTCATGACTACCTCCGCAGCAAGCTGTGTTCCCTCTATGAAAATGACTGCAT
TTTTGATAAATTTGAGTGTGTGTGGAATGGGTCAGACAGTGTCATCATGACAGGCTCCTACAACAACTTC
TTCAGGATGTTCGACAGAAACACCAAGCGTGATGTGACCCTTGAGGCTTCGAGGGAAAACAGCAAGCCCC
GGGCTATCCTCAAACCCCGAAAAGTGTGTGTGGGGGGCAAGCGGAGAAAAGACGAGATCAGTGTCGACAG
TCTGGACTTTAGCAAAAAGATCTTGCATACAGCTTGGCATCCTTCAGAAAATATTATAGCAGTGGCGGCT
ACAAATAACCTATATATATTCCAGGACAAGGTTAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

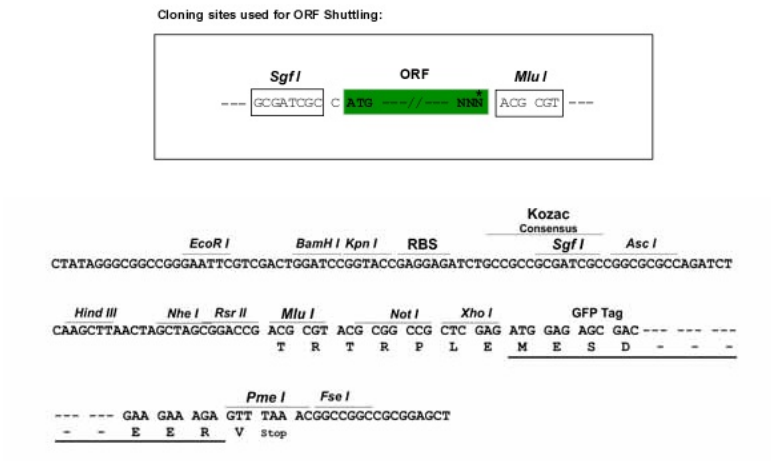
>RG232711 representing NM_001271948
Red=Cloning site Green=Tags(s)

MNYPDENTYGNKADIISTVEFNHTGELLATGDKGGRVVIFQREQESKNQVHRRGEYNVYSTFQSHEPEFD
YLKSLEIEEKINKIRWLPQQNAAYFLLSTNDKTVKLWKVSERDKRPEGYNLKDEEGRLRDPATITTLRVP
VLRPMDLMVEATPRRVFANAHTYHINSISVNSDYETYMSADDLRINLWNFEITNQSFNIVDIKPANMEEL
TEVITAAEFHPHHCNTFVYSSSKGTIRLCDMRASALCDRHTKFFEEPEDPSNRSFFSEIISSISDVKFSH
SGRYIMTRDYLTVKVWDLNMENRPIETYQVHDYLRSKLCSLYENDCIFDKFECVWNGSDSVIMTGSYNNF
FRMFDRNTKRDVTLEASRENSKPRAILKPRKVCVGGKRRKDEISVDSLDFSKKILHTAWHPSENIIAVAA
TNNLYIFQDKVN

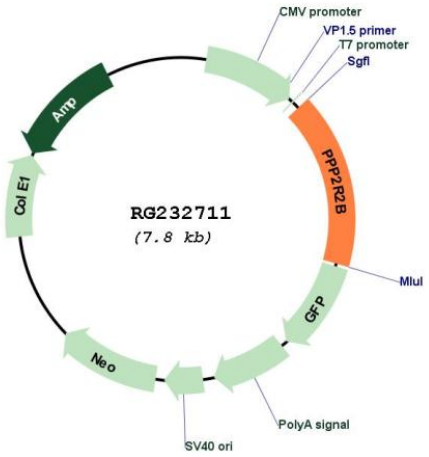
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001271948

ORF Size: 1296 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:	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, NP_001258877.1
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
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]