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Product datasheet for SC307343

PPP2R2B (NM_181678) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R2B (NM_181678) 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-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>SC307343 representing NM_181678.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAATTATCCAGATGAAAACACCTATGGAAATAAAGCTGACATTATCTCTACGGTAGAATTCAACCAC
ACGGGAGAATTACTAGCGACAGGGGACAAGGGGGGTCGGGTTGTAATATTTCAACGAGAGCAGGAGAGT
AAAAATCAGGTTCATCGTAGGGGTGAATACAATGTTTACAGCACATTCCAGAGCCATGAACCCGAGTTC
GATTACCTGAAGAGTTTAGAAATAGAAGAAAAAATCAATAAAATAAGATGGCTCCCCCAGCAGAATGCA
GCTTACTTTCTTCTGTCTACTAATGATAAAACTGTGAAGCTGTGGAAAGTCAGCGAGCGTGATAAGAGG
CCAGAAGGCTACAATCTGAAAGATGAGGAGGGCCGGCTCCGGGATCCTGCCACCATCACAACCCTGCGG
GTGCCTGTCCTGAGACCCATGGACCTGATGGTGGAGGCCACCCCACGAAGAGTATTTGCCAACGCACAC
ACATATCACATCAACTCCATATCTGTCAACAGCGACTATGAAACCTACATGTCCGCTGATGACCTGAGG
ATTAACCTATGGAACTTTGAAATAACCAATCAAAGTTTTAATATTGTGGACATTAAGCCAGCCAACATG
GAGGAGCTCACGGAGGTGATCACAGCAGCCGAGTTCCACCCCCATCATTGCAACACCTTCGTGTACAGC
AGCAGCAAAGGGACAATCCGGCTGTGTGACATGCGGGCATCTGCCCTGTGTGACAGGCACACCAAATTT
TTTGAAGAGCCGGAAGATCCAAGCAACAGATCATTTTTCTCTGAAATTATCTCTTCGATTTCGGATGTG
AAGTTCAGCCACAGTGGGAGGTATATCATGACCAGGGACTACTTGACCGTCAAAGTCTGGGATCTCAAC
ATGGAAAACCGCCCCATCGAGACTTACCAGGTTCATGACTACCTCCGCAGCAAGCTGTGTTCCCTCTAT
GAAAATGACTGCATTTTTGATAAATTTGAGTGTGTGTGGAATGGGTCAGACAGTGTCATCATGACAGGC
TCCTACAACAACTTCTTCAGGATGTTCGACAGAAACACCAAGCGTGATGTGACCCTTGAGGCTTCGAGG
GAAAACAGCAAGCCCCGGGCTATCCTCAAACCCCGAAAAGTGTGTGTGGGGGGCAAGCGGAGAAAAGAC
GAGATCAGTGTCGACAGTCTGGACTTTAGCAAAAAGATCTTGCATACAGCTTGGCATCCTTCAGAAAAT
ATTATAGCAGTGGCGGCTACAAATAACCTATATATATTCCAGGACAAGGTTAACTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:

ACCN: NM_181678

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).

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.

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_181678.2
RefSeq Size:	2021 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 (6) differs in the 5' UTR and the 5' coding region, 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.