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Product datasheet for TR302320

PPP2R2B Human shRNA Plasmid Kit (Locus ID 5521)

Product data:

Product Type:	shRNA Plasmids
Product Name:	PPP2R2B Human shRNA Plasmid Kit (Locus ID 5521)
Locus ID:	5521
Synonyms:	B55BETA; PP2AB55BETA; PP2ABBETA; PP2APR55B; PP2APR55BETA; PR2AB55BETA; PR2ABBETA; PR2APR55BETA; PR52B
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PPP2R2B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5521). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 001127381, NM 001271899, NM 001271900, NM 001271948, NM 004576, NM 181674, NM 181675, NM 181676, NM 181677, NM 181678, NR 073526, NR 073527, NM 181675.1, NM 181675.2, NM 181675.3, NM 181677.1, NM 181677.2, NM 181678.1, NM 181678.2, NM 181674.1, NM 181674.2, NM 181676.1, NM 181676.2, NM 001271948.1, NM 001271899.1, NM 001271900.1, NM 001127381.1, NM 004576.2, BC031790, BC031790.1, NM 001271900.2, NM 181675.4</u>
UniProt ID:	<u>Q00005</u>



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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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .
Performance Guaranteed:	OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
	For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene

expression knockdown compared to the scrambled shRNA control (Western Blot data

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preferred).