

Product datasheet for TR302340

OriGene Technologies, Inc.

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PPM1A Human shRNA Plasmid Kit (Locus ID 5494)

Product data:

Product Type: shRNA Plasmids

Product Name: PPM1A Human shRNA Plasmid Kit (Locus ID 5494)

Locus ID: 5494

Synonyms: PP2C-ALPHA; PP2CA; PP2Calpha

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: PPM1A - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5494). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 021003, NM 177951, NM 177952, NM 021003.1, NM 021003.2, NM 021003.3,

NM 021003.4, NM 177952.1, NM 177952.2, NM 177951.1, NM 177951.2, BC026691, BC026691.1, BC063243, BC063243.1, NM 177951.3, NM 177952.3, NM 021003.5

UniProt ID: P35813

Summary: The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein

phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described.

[provided by RefSeq, Jul 2008]

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 preferred).