

Product datasheet for TR316795

OriGene Technologies, Inc.

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PTP4A2 Human shRNA Plasmid Kit (Locus ID 8073)

Product data:

Product Type: shRNA Plasmids

Product Name: PTP4A2 Human shRNA Plasmid Kit (Locus ID 8073)

Locus ID: 8073

Synonyms: HH7-2; HH13; HU-PP-1; OV-1; PRL-2; PRL2; ptp-IV1a; ptp-IV1b; PTP4A; PTPCAAX2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: PTP4A2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

8073). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001195100, NM 001195101, NM 003479, NM 080391, NM 080392, NM 080391.1,

NM 080391.2, NM 080391.3, NM 001195101.1, NM 001195100.1, NM 003479.2,

NM 080392.2, BC070182, BC070182.1, BC018662, BC070181, BM996809, NM 001369858, NM 001369860, NM 001369859, NM 001195100.2, NM 080391.4, NM 001195101.2

UniProt ID: 012974

Summary: The protein encoded by this gene belongs to a small class of the protein tyrosine

phosphatase (PTP) family. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. PTPs in this class contain a protein tyrosine phosphatase catalytic domain and a characteristic C-terminal prenylation motif. This PTP has been shown

to primarily associate with plasmic and endosomal membrane through its C-terminal

prenylation. This PTP was found to interact with the beta-subunit of Rab

geranylgeranyltransferase II (beta GGT II), and thus may function as a regulator of GGT II activity. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which suggested its role in tumorigenesis. Alternatively spliced transcript variants have been described. Related pseudogenes exist on chromosomes 11, 12 and 17. [provided by RefSeq,

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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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).