

## **Product datasheet for TL302327**

#### OriGene Technologies, Inc.

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### PPP1R16A Human shRNA Plasmid Kit (Locus ID 84988)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** PPP1R16A Human shRNA Plasmid Kit (Locus ID 84988)

Locus ID: 84988
Synonyms: MYPT3

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: PPP1R16A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

84988). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001329442, NM 001329443, NM 001329444, NM 001329445, NM 032902, NM 032902.1,

NM 032902.2, NM 032902.3, NM 032902.4, NM 032902.5, NM 032902.6, BC053506,

BC053506.1, BC007854, BC049841, BM761618, BM762557, NM 032902.7

UniProt ID: Q96I34

**Summary:** Myosin light chain kinase and phosphatase (MLCP) complexes control the phosphorylation

states of regulatory myosin light chains, which is crucial for muscle and intracellular movement. MLCPs typically contain a catalytic protein phosphatase 1 (PP1c) subunit, a myosin phosphatase targeting (MYPT) subunit, and another smaller subunit. The protein encoded by this gene represents an MYPT subunit, which is responsible for directing PP1c to its intended targets. However, while the phosphorylation of other MYPT members results in PP1c inactivation, phosphorylation of the encoded protein by protein kinase A results in PP1c

activation. [provided by RefSeq, Jan 2020]

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 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).