

Product datasheet for **TR310237**

Myosin Phosphatase 2 (PPP1R12B) Human shRNA Plasmid Kit (Locus ID 4660)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Myosin Phosphatase 2 (PPP1R12B) Human shRNA Plasmid Kit (Locus ID 4660)
Locus ID:	4660
Synonyms:	MYPT2; PP1bp55
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PPP1R12B - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4660). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001167857 , NM_001167858 , NM_001197131 , NM_001331029 , NM_002481 , NM_032103 , NM_032104 , NM_032105 , NM_032104.1 , NM_032104.2 , NM_002481.1 , NM_002481.2 , NM_002481.3 , NM_032103.1 , NM_032103.2 , NM_001167858.1 , NM_001167857.1 , NM_001197131.1 , NM_032105.1 , NM_032105.2 , BC110907 , BC034430 , BC071166 , BC144699 , NM_002481.4 , NM_032103.3 , NM_032104.3
UniProt ID:	O60237
Summary:	Myosin phosphatase is a protein complex comprised of three subunits: a catalytic subunit (PP1c-delta, protein phosphatase 1, catalytic subunit delta), a large regulatory subunit (MYPT, myosin phosphatase target) and small regulatory subunit (sm-M20). Two isoforms of MYPT have been isolated--MYPT1 and MYPT2, the first of which is widely expressed, and the second of which may be specific to heart, skeletal muscle, and brain. Each of the MYPT isoforms functions to bind PP1c-delta and increase phosphatase activity. This locus encodes both MYTP2 and M20. Alternatively spliced transcript variants encoding different isoforms have been identified. Related pseudogenes have been defined on the Y chromosome. [provided by RefSeq, Oct 2011]
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 .



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**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).