

## Product datasheet for TL311352

## MTMR6 Human shRNA Plasmid Kit (Locus ID 9107)

## **Product data:**

## OriGene Technologies, Inc.

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| Product Type:                | shRNA Plasmids  |
|------------------------------|---|
| Product Name:                | MTMR6 Human shRNA Plasmid Kit (Locus ID 9107)   |
| Locus ID:                    | 9107  |
| Vector:                      | pGFP-C-shLenti (TR30023)  |
| E. coli Selection:           | Chloramphenicol (34 ug/ml)  |
| Mammalian Cell<br>Selection: | Puromycin   |
| Format:                      | Lentiviral plasmids   |
| Components:                  | MTMR6 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 9107).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.   |
| RefSeq:                      | <u>NM 004685</u> , <u>NM 004685.1</u> , <u>NM 004685.2</u> , <u>NM 004685.3</u> , <u>BC040012</u> , <u>BC040012.1</u> , <u>BC031834</u> , <u>BC035436</u> , <u>NM 004685.4</u>  |
| UniProt ID:                  | <u>Q9Y217</u>   |
| Summary:                     | Phosphatase that acts on lipids with a phosphoinositol headgroup (PubMed:19038970,<br>PubMed:22647598). Dephosphorylates phosphatidylinositol 3-phosphate (PtdIns(3)P) and<br>phosphatidylinositol 3,5-bisphosphate (PubMed:19038970, PubMed:22647598) (Probable).<br>Binds with high affinity to phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) but also to<br>phosphatidylinositol 3-phosphate (PtdIns(3)P), phosphatidylinositol 4-phosphate (PtdIns(4)P),<br>and phosphatidylinositol 5-phosphate (PtdIns(5)P), phosphatidic acid and phosphatidylserine<br>(PubMed:19038970). Negatively regulates ER-Golgi protein transport (By similarity). Probably<br>in association with MTMR9, plays a role in the late stages of macropinocytosis by<br>dephosphorylating phosphatidylinositol 3-phosphate in membrane ruffles<br>(PubMed:24591580). Acts as a negative regulator of KCNN4/KCa3.1 channel activity in CD4(+)<br>T-cells possibly by decreasing intracellular levels of phosphatidylinositol 3-phosphate<br>(PubMed:15831468). Negatively regulates proliferation of reactivated CD4(+) T-cells<br>(PubMed:16847315). In complex with MTMR9, negatively regulates DNA damage-induced<br>apoptosis (PubMed:19038970, PubMed:22647598). The formation of the MTMR6-MTMR9<br>complex stabilizes both MTMR6 and MTMR9 protein levels (PubMed:19038970).<br>[UniProtKB/Swiss-Prot Function] |



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|                            | MTMR6 Human shRNA Plasmid Kit (Locus ID 9107) – TL311352   |
|----------------------------|--|
| 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<br>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<br>(90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with<br>newly designed constructs, please contact Technical Services at techsupport@origene.com.<br>Please provide your data indicating the transfection efficiency and measurement of gene<br>expression knockdown compared to the scrambled shRNA control (Western Blot data<br>preferred).   |

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