

Product datasheet for **TR514602**

Tmem108 Mouse shRNA Plasmid (Locus ID 81907)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Tmem108 Mouse shRNA Plasmid (Locus ID 81907)
Locus ID:	81907
Synonyms:	AI462967; B130017P16Rik; R74726
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Tmem108 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 81907). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC052085 , NM_178638 , NM_001359465 , NM_178638.1 , NM_178638.2 , NM_178638.3 , NM_178638.4
UniProt ID:	Q8BHE4
Summary:	Transmembrane protein required for proper cognitive functions. Involved in the development of dentate gyrus (DG) neuron circuitry, is necessary for AMPA receptors surface expression and proper excitatory postsynaptic currents of DG granule neurons (PubMed:28096412). Regulates the organization and stability of the microtubule network of sensory neurons to allow axonal transport. Through the interaction with DST, mediates the docking of the dynein/dynactin motor complex to vesicle cargos for retrograde axonal transport (PubMed:17287360). In hippocampal neurons, required for BDNF-dependent dendrite outgrowth (PubMed:21849472). Cooperates with SH3GL2 and recruits the WAVE1 complex to facilitate actin-dependent BDNF:NTRK2 early endocytic trafficking and mediate signaling from early endosomes (PubMed:21849472, PubMed:27605705).[UniProtKB/Swiss-Prot Function]
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).