

## Product datasheet for **TR314234**

### CACNG2 Human shRNA Plasmid Kit (Locus ID 10369)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	CACNG2 Human shRNA Plasmid Kit (Locus ID 10369)
Locus ID:	10369
Synonyms:	MRD10
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CACNG2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 10369). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_006078</a> , <a href="#">NM_006078.1</a> , <a href="#">NM_006078.2</a> , <a href="#">NM_006078.3</a> , <a href="#">BC112297</a> , <a href="#">BC069612</a> , <a href="#">BC112299</a> , <a href="#">NM_006078.5</a>
UniProt ID:	<a href="#">Q9Y698</a>
Summary:	The protein encoded by this gene is a type I transmembrane AMPA receptor regulatory protein (TARP). TARPs regulate both trafficking and channel gating of the AMPA receptors. The AMPA subtype of ionotropic glutamate receptors are ligand gated ion channels that are typically activated by glutamate released from presynaptic neuron terminals and mediate fast neurotransmission in excitatory synapses. TARPs thus play an important role in synaptic plasticity, learning and memory. Mutations in this gene cause an autosomal dominant form of cognitive disability. [provided by RefSeq, Jul 2017]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).