

## Product datasheet for **TL514829**

### **Psmid14 Mouse shRNA Plasmid (Locus ID 59029)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	Psmid14 Mouse shRNA Plasmid (Locus ID 59029)
<b>Locus ID:</b>	59029
<b>Synonyms:</b>	2610312C03Rik; 3200001M20Rik; AA986732; Pad1; Poh1; rpm11
<b>Vector:</b>	pGFP-C-shLenti (TR30023)
<b>E. coli Selection:</b>	Chloramphenicol (34 ug/ml)
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Lentiviral plasmids
<b>Components:</b>	Psmid14 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 59029). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
<b>RefSeq:</b>	<a href="#">BC003742</a> , <a href="#">NM_021526</a> , <a href="#">NM_021526.1</a> , <a href="#">NM_021526.2</a>
<b>UniProt ID:</b>	<a href="#">O35593</a>
<b>Summary:</b>	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. The PSMD14 subunit is a metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains within the complex. Plays a role in response to double-strand breaks (DSBs): acts as a regulator of non-homologous end joining (NHEJ) by cleaving 'Lys-63'-linked polyubiquitin, thereby promoting retention of JMJD2A/KDM4A on chromatin and restricting TP53BP1 accumulation. Also involved in homologous recombination repair by promoting RAD51 loading.[UniProtKB/Swiss-Prot Function]
<b>shRNA Design:</b>	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).