

Product datasheet for **TR504128**

Mcoln2 Mouse shRNA Plasmid (Locus ID 68279)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Mcoln2 Mouse shRNA Plasmid (Locus ID 68279)
Locus ID:	68279
Synonyms:	3300002C04Rik; AI549968; C86638; TRPML2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Mcoln2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 68279). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC029847 , NM_001005846 , NM_026656 , NM_001005846.1 , NM_001005846.2 , NM_026656.1 , NM_026656.2 , NM_026656.3 , NM_026656.4 , NM_026656.5
UniProt ID:	Q8K595
Summary:	Nonselective cation channel probably playing a role in the regulation of membrane trafficking events. Acts as Ca(2+)-permeable cation channel with inwardly rectifying activity (PubMed:19763610). May activate ARF6 and be involved in the trafficking of GPI-anchored cargo proteins to the cell surface via the ARF6-regulated recycling pathway (By similarity). May play a role in immune processes. In adaptive immunity, TRPML2 and TRPML1 may play redundant roles in the function of the specialized lysosomes of B cells (PubMed:17050035). In the innate immune response, may play a role in the regulation of chemokine secretion and macrophage migration (PubMed:26432893). Through a possible and probably tissue-specific heteromerization with MCOLN1 may be at least in part involved in many lysosome-dependent cellular events.[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 .



[View online »](#)

**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).