

# Product datasheet for TR501162

## Kcnk4 Mouse shRNA Plasmid (Locus ID 16528)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	shRNA Plasmids
Product Name:	Kcnk4 Mouse shRNA Plasmid (Locus ID 16528)
Locus ID:	16528
Synonyms:	MLZ-622; Tex40; TRAAK; TRAAKt
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Kcnk4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 16528). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>BC119784, NM 008431, NM 008431.1, NM 008431.2, NM 008431.3</u>
UniProt ID:	<u>088454</u>
Summary:	Voltage-insensitive potassium channel (PubMed:9628867). Channel opening is triggered by mechanical forces that deform the membrane. Channel opening is triggered by raising the intracellular pH to basic levels (By similarity). The channel is inactive at 24 degrees Celsius (in vitro); raising the temperature to 37 degrees Celsius increases the frequency of channel opening, with a further increase in channel activity when the temperature is raised to 42 degrees Celsius (By similarity). Plays a role in the sensory perception of pain caused by pressure (PubMed:19279663). Plays a role in the perception of pain caused by heat (PubMed:19279663).[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 <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .



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### **CRIGENE** Kcnk4 Mouse shRNA Plasmid (Locus ID 16528) – TR501162

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).

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