

Product datasheet for TL509198

Kcnk2 Mouse shRNA Plasmid (Locus ID 16526)

Product data:

Product Type: shRNA Plasmids

Product Name: Kcnk2 Mouse shRNA Plasmid (Locus ID 16526)

Locus ID: 16526

Synonyms: A430027H14Rik; AI848635; TREK-1

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Kcnk2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 16526).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC062094</u>, <u>NM 001159850</u>, <u>NM 001281847</u>, <u>NM 001281848</u>, <u>NM 010607</u>, <u>NR 027627</u>,

NM 001357119, NM 010607.1, NM 010607.2, NM 010607.3, NM 001159850.1,

NM 001281848.1, NM 001281847.1, BM945997

UniProt ID: P97438

Summary: Ion channel that contributes to passive transmembrane potassium transport. Reversibly

converts between a voltage-insensitive potassium leak channel and a voltage-dependent outward rectifying potassium channel in a phosphorylation-dependent manner. In astrocytes, forms mostly heterodimeric potassium channels with KCNK1, with only a minor proportion of functional channels containing homodimeric KCNK2 (PubMed:24496152). In astrocytes, the

heterodimer formed by KCNK1 and KCNK2 is required for rapid glutamate release in response to activation of G-protein coupled receptors, such as F2R and CNR1

(PubMed:24496152).[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 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).