

Product datasheet for TL303822

OriGene Technologies, Inc.

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KCNJ1 Human shRNA Plasmid Kit (Locus ID 3758)

Product data:

Product Type: shRNA Plasmids

Product Name: KCNJ1 Human shRNA Plasmid Kit (Locus ID 3758)

Locus ID: 3758

Synonyms: KIR1.1; ROMK; ROMK1

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: KCNJ1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3758).

5µg purified plasmid DNA per construct

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

RefSeq: NM 000220, NM 153764, NM 153765, NM 153766, NM 153767, NM 153767.1, NM 153767.2,

NM 153767.3, NM 153765.1, NM 153765.2, NM 153766.1, NM 153766.2, NM 153764.1, NM 153764.2, NM 000220.1, NM 000220.2, NM 000220.3, NM 000220.4, BC074752, BC074752.2, BC063109, BC136360, BC136361, NM 000220.6, NM 153766.3, NM 153764.3

UniProt ID: P48048

Summary: Potassium channels are present in most mammalian cells, where they participate in a wide

range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. It is activated by internal ATP and probably plays an important role in potassium homeostasis. The encoded protein has a greater tendency to allow potassium to flow into a cell rather than out of a cell. Mutations in this gene have been associated with antenatal Bartter syndrome, which is characterized by salt wasting, hypokalemic alkalosis, hypercalciuria, and low blood pressure. Multiple

transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Jul 2008]

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>.





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).