

## **Product datasheet for TL303807**

## OriGene Technologies, Inc.

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## **KCNN3 Human shRNA Plasmid Kit (Locus ID 3782)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** KCNN3 Human shRNA Plasmid Kit (Locus ID 3782)

**Locus ID:** 3782

**Synonyms:** hSK3; KCa2.3; SK3; SKCA3; ZLS3

**Vector:** pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** KCNN3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3782).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001204087, NM 002249, NM 170782, NM 170782.1, NM 170782.2, NM 002249.1,

NM 002249.2, NM 002249.3, NM 002249.4, NM 002249.5, NM 001204087.1, BC042147,

BC030100, NM 001365838, NM 001365837, NM 170782.3, NM 002249.6

UniProt ID: Q9UGI6

**Summary:** Action potentials in vertebrate neurons are followed by an afterhyperpolarization (AHP) that

may persist for several seconds and may have profound consequences for the firing pattern of the neuron. Each component of the AHP is kinetically distinct and is mediated by different calcium-activated potassium channels. This gene belongs to the KCNN family of potassium channels. It encodes an integral membrane protein that forms a voltage-independent calcium-activated channel, which is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. This gene contains two CAG repeat regions in the coding sequence. It was thought that expansion of one or both of these repeats could lead to an increased susceptibility to schizophrenia or bipolar disorder, but studies indicate that this

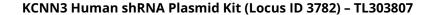
have been found for this gene. [provided by RefSeq, Feb 2011]

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>.

is probably not the case. Alternatively spliced transcript variants encoding different isoforms







## 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).