

# **Product datasheet for SC309151**

# KCNC4 (NM\_153763) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** KCNC4 (NM\_153763) Human Untagged Clone

Tag: Tag Free Symbol: KCNC4

Synonyms: HKSHIIIC; KSHIIIC; KV3.4; MGC126818

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

#### OriGene Technologies, Inc.

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Fully Sequenced ORF: >SC309151 representing NM\_153763.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGGATCGCC

ATGATCAGCTCGGTGTGTGTCTCCTCCTACCGCGGGCCAAGTCGGGGAACAAGCCTCCGTCCAAAACA TGTCTGAAGGAGGAGATGGCCAAGGGCGAGGCGTCGGAGAAGATCATCAACGTGGGCGGCACGCGA GGCGGGGCCCGAGACCGATGGCGGCGTGTGGGTAGCAGCGGCAGCAGCGGCGGCGGGGGGCTGC GAGTTCTTCTTCGACAGGCACCCGGGCGTCTTCGCCTACGTGCTCAACTACTACCGCACCGGCAAGCTG CACTGCCCGCGGACGTGTGCGGGCCGCTCTTCGAAGAGGAGCTCACCTTCTGGGGCATCGACGAGACC GACGTGGAACCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGGAGGCGCTCGACATCTTC GCCCTGCAGCGACTGGGCCCCCACGAGGGAGGCGCGGGCCATGGCGCCGGGTCTGGGGGCTGCCGCGGC TGGCAGCCCGCATGTGGGCGCTCTTCGAGGATCCCTACTCCTCCCGGGCCGCTAGGGTAGTGGCCTTT GCCTCTCTTCTTCATCCTGGTCTCCATCACCACTTTCTGCCTGGAGACCCATGAGGCCTTTAATATC GACCGCAACGTGACAGAGATCCTCCGCGTAGGGAACATCACCAGCGTGCACTTCCGGCGGGAGGTAGAG ACAGAGCCCATCCTGACCTACATCGAGGGCGTATGTGTGCTGTGGTTCACACTGGAGTTCCTGGTGCGC ATCGTGTGCCCCCGACACGCTGGACTTCGTCAAGAACCTGCTCAACATCATCGACTTTGTGGCCATC CTGCCCTTCTACCTGGAGGTGGGGCTGAGCGGCCTGTCATCCAAGGCGGCCCGCGACGTGCTGGGCTTC CTGCGCGTGGTGCGCTTCGTGCGCATCCTGCGTATCTTCAAGCTCACACGCCACTTCGTGGGGCTACGC GTGCTGGGCCACACCCTGAGGGCCAGCACCAATGAGTTCCTGCTGCTTATCATCTTCCTGGCCCTGGGT GTGCTCATCTTTGCCACCATGATCTACTACGCTGAGCGCATTGGGGCCAGGCCCTCCGACCCTCGGGGT AATGACCACACCGACTTCAAGAACATCCCCATTGGCTTCTGGTGGGCTGTGGTCACCATGACGACACTG GTGCTCACCATCGCCATGCCGGTGCCTGTCATCGTCAACAACTTCGGCATGTACTACTCCCTGGCCATG TACTGCAAGTCTGAGGAGACTTCCCCCCGGGACAGCACCTGCAGTGATACCAGCCCCCCTGCCCGGGAA TGGCCTAGGGAGTTTCCAAATGGACCTCAGACCTTGGGATTTGGCATGTGTTTTGTGTGGGGCTTCCCT AAGCATAAAGATGTGCCTTTATGA

AGCGGACCGACGCGTACGCCGCCCCCCCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:Sgfl-RsrIIACCN:NM\_153763Insert Size:1749 bp



**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

**OTI Annotation:** 

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** NM 153763.2

RefSeq Size: 1855 bp
RefSeq ORF: 1749 bp
Locus ID: 3749
Cytogenetics: 1p13.3

**Protein Families:** Druggable Genome, Ion Channels: Potassium, Transmembrane

**MW:** 64.5 kDa





### **Gene Summary:**

The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to the Shaw subfamily. The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes. It generates atypical voltage-dependent transient current that may be important for neuronal excitability. Multiple transcript variants have been found for this gene. [provided by RefSeq, Jul 2010] Transcript Variant: This variant (2) is missing two 3' end exons found in transcript variant 1, resulting in an isoform (b) that is shorter with a distinct C-terminus compared to isoform a.