

## Product datasheet for **SC310304**

### KCNC1 (NM\_004976) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNC1 (NM_004976) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNC1
Synonyms:	EPM7; KV3.1; KV4; NGK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>SC310304 representing NM_004976. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCCCTTACCCATGGGAGCGGCCGCCAGGGGAGTTGGCGCCGGGAGGGGCGCGCCATGCCTAAGGG  
 GGCGCCGCGATGGGCCAAGGGGACGAGAGCGAGCGCATCGTGATCAACGTGGCGGCACGCGCCACCAG  
 ACGCACCCTCGACCTGCGCACGCTGCCCGGCACGCGGCTCGCCTGGCTGGCGGAGCCCGACGCCAC  
 AGCCACTTCGACTATGACCCGCGTGCTGACGAGTTCTTCTCGACCGCCACCCGGCGTCTTCGCGCAC  
 ATCCTGAACTACTACCGACGGGCAAGCTGCACTGCCAGCCGACGTGTGCGGGCCGCTCTACGAGGAG  
 GAGCTGGCCTTCTGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACGTACCGCCAGCAC  
 CGCGACGCCGAGGAGGCTCTGGACAGCTTCGGCGGCGCTCCTCTGGACAACAGCGCCGACGACGCGGAC  
 GCCGACGCCCTGGGACTCGGGCGACGGCGAGGACGAGCTGGAGATGACCAAGCGCCTGGCGCTCAGT  
 GACTCCCCGATGGCCGGCTGGCGGCTTTTGGCGCCGCTGGCAGCCGCGCATCTGGGCGCTCTTCGAG  
 GACCCGTAATCGTCCCGCTACGCGCGGTATGTGGCCTTCGCTTCCTCTTCTCATCCTGGTCTCCATC  
 ACCACCTTCTGCCTGGAGACCCACGAGCGCTTCAACCCCATCGTGAACAAGACGGAGATCGAGAAGCTT  
 CGCAATGGCAGCAAGTGCCTACTACCGGGAGGCCGAGACGGAGGCCTTCCTTACCTACATCGAGGGC  
 GTCTGTGTGGTCTGGTTACCTTCGAGTTCCTCATGCGTGTATCTTCTGCCCAACAAGGTAGAGTTC  
 ATCAAGAACTCGCTCAACATCATTGACTTTGTGGCCATCCTGCCCTTCTACCTGGAGGTGGGGCTGAGC  
 GGCCTGTCTCCAAGGCAGCCAAGGACGTGCTGGGCTTCTGCGCGTCTCGGCTTCGTGCGCATCTTG  
 CGCATCTTTAAGCTGACCCGCCACTTTGTGGGCTGCGGCTCTGGGCCACACGCTCCGAGCCAGCACC  
 AACGAGTTCCTGCTGCTCATCTTCTGCGCTTGGGCGTGTGATCTTCGCCACCATGATCTACTAC  
 GCCGAGAGGATAGGGGCACAGCCCAATGACCCAGCGCCAGTGAGCACACGCACCTTTAAGAACATCCCC  
 ATCGGCTTCTGGTGGGCGTGGTCACCATGACGACCTGGGCTATGGAGACATGTACCGCAGACGTGG  
 TCCGGCATGCTGGTGGGGCTCTGTGTGCGCTGGCGGGCGTGTACCATCGCCATGCCCGTGCCGTC  
 ATCGTGAACAATTTGGGATGTATTACTCTTAGCCATGGCTAAGCAGAACTACCAAAGAAAAAAG  
 AAGCATATTCGCGGCCACCGACGTGGGATCTCCCAATTATTGTAAATCTGTCGTAATCTCCACAC  
 CACAGTACTCAGAGTGACACATGTCCGCTGGCCAGGAAGAAATTTAGAAATTAACAGAGCAGGTAGG  
 AAACCTCTTAGAGGCATGTCGATCGA



[View online »](#)

<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_004976
<b>Insert Size:</b>	1614 bp
<b>OTI Disclaimer:</b>	<p>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:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	The ORF of this clone has been fully sequenced and found to contain one SNP compared with NM_004976.2.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_004976.2</a>
<b>RefSeq Size:</b>	1602 bp
<b>RefSeq ORF:</b>	1614 bp
<b>Locus ID:</b>	3746
<b>UniProt ID:</b>	<a href="#">P48547</a>
<b>Cytogenetics:</b>	11p15.1
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Potassium, Transmembrane
<b>MW:</b>	60.4 kDa

**Gene Summary:**

This gene encodes a member of a family of integral membrane proteins that mediate the voltage-dependent potassium ion permeability of excitable membranes. Alternative splicing is thought to result in two transcript variants encoding isoforms that differ at their C-termini. These isoforms have had conflicting names in the literature: the longer isoform has been called both "b" and "alpha", while the shorter isoform has been called both "a" and "beta" (PMIDs 1432046, 12091563). [provided by RefSeq, Oct 2014]

Transcript Variant: This variant (2) lacks two exons and its 3' exon extends past a splice site used in variant 1, resulting in a distinct 3' coding region and 3' UTR, compared to variant 1. The encoded isoform (2) has a shorter and distinct C-terminus, compared to isoform 1.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.