

Product datasheet for **SC310251**

KCNN2 (NM_021614) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNN2 (NM_021614) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNN2
Synonyms:	hSK2; KCa2.2; SK2; SKCA2; SKCa 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >SC310251 representing NM_021614.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGAGCAGCTGCAGGTACAACGGGGCGTCATGCGGCCGCTCAGCAACTTGAGCGCTCCCGCCGGAAC
CTGCACGAGATGGACTCAGAGGCGCAGCCCTGCAGCCCCCGCTGTGCGGAGGAGGTGGCGCGCG
TCCTCCCGTCTGCAGCCGCTGCCGCCGCCGCTGTTTCGTCTCAGCCCCGAGATCGTGGTGTCT
AAGCCCGAGCACAACTCCAACAACCTGGCGCTCTATGGAACCGCGCGGAGGCAGCACTGGAGGA
GGCGCGCGGCTGGCGGAGCGGCACGGCAGCAGCAGTGGCACCAAGTCCAGCAAAAAGAAAAACCAG
AACATCGGCTACAAGCTGGGCCACCGCGCGCCCTGTTGAAAAGCGCAAGCGGCTCAGCGACTACGCG
CTCATCTTCGGCATGTTGGCATCGTGGTTCATGGTTCAGAGACCAGCTGTGTTGGGCGCCTACGAC
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ATCATCGTGTACCACGCCAGGAAATACAGTTGTTTCATGGTGGACAATGGAGCAGATGACTGGAGAATA
GCCATGACTTATGAGCGATTTTCTTCATCTGCTTGGAAATACTGGTGTGTGCTATTCATCCCATACCT
GGGAATTATACATTACATGGACGGCCCGCTTGCCCTTCTCTATGCCCATCCACAACCACCGCTGAT
GTGGATATTATTTATCTATACCAATGTTCTTAAGACTCTATCTGATTGCCAGAGTCATGTTTTACAT
AGCAAACTTTTCACTGATGCCTCTCTAGAAGCATTGGAGCACTTAATAAGATAAACTTCAATACACGT
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GTAGTGCAAGGAAGCTAGAACTTACCAAAGCAGAAAAACACGTGCACAATTTTCATGATGGATACTCAG
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ATTGTTACCTGGAAACAAACTAGAGACTTTGATTGGTAGCATCCACGCCCTCCCTGGGCTCATAAGC
CAGACCATCAGGCAGCAGCAGAGAGATTTTCATTGAGGCTCAGATGGAGAGCTACGACAAGCACGTCCT
TACAATGCTGAGCGGTCCCGTCTCGTCCAGGAGGCGGCGTCTCTTCCACAGCACCACCAACTCA
TCAGAGAGTAGCTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
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Restriction Sites: Sgfl-Mlul
ACCN: NM_021614
Insert Size: 1740 bp

OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
OTI Annotation:	<p>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.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none"> 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_021614.3
RefSeq Size:	2531 bp
RefSeq ORF:	1740 bp
Locus ID:	3781
UniProt ID:	Q9H2S1
Cytogenetics:	5q22.3
Domains:	SK_channel, CaMBD
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	63.8 kDa

Gene 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. The protein encoded by this gene is activated before membrane hyperpolarization and is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. This gene is a member of the KCNN family of potassium channel genes. The encoded protein is an integral membrane protein that forms a voltage-independent calcium-activated channel with three other calmodulin-binding subunits. Alternate splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (a).