OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC101026

KCNN2 (NM_170775) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNN2 (NM_170775) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNN2
Synonyms:	hSK2; KCa2.2; SK2; SKCA2; SKCa 2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_170775, the custom clone sequence may differ by one or more nucleotides

ATGTGGTTGATATCAATAACTTTTCTCTCCATTGGTTATGGTGACATGGTACCTAACACATACTGTGGAA
AAGGAGTCTGCTTACTTACTGGAATTATGGGTGCTGGTTGCACAGCCCTGGTGGTAGCTGTAGTGGCAAG
GAAGCTAGAACTTACCAAAGCAGAAAAACACGTGCACAATTTCATGATGGATACTCAGCTGACTAAAAGA
GTAAAAAATGCAGCTGCCAATGTACTCAGGGAAACATGGCTAATTTACAAAAATACAAAGCTAGTGAAAA
AGATAGATCATGCAAAAGTAAGAAAACATCAACGAAAATTCCTGCAAGCTATTCATCAATTAAGAAGTGT
AAAAATGGAGCAGAGGAAACTGAATGACCAAGCAAACACTTTGGTGGACTTGGCAAAGACCCAGAACATC
ATGTATGATATGATTTCTGACTTAAACGAAAGGAGTGAAGACTTCGAGAAGAGGATTGTTACCCTGGAAA
CAAAACTAGAGACTTTGATTGGTAGCATCCACGCCCTCCCTGGGCTCATAAGCCAGACCATCAGGCAGCA
GCAGAGAGATTTCATTGAGGCTCAGATGGAGAGCTACGACAAGCACGTCACTTACAATGCTGAGCGGTCC
CGGTCCTCGTCCAGGAGGCGGCGGTCCTCTTCCACAGCACCACCAACTTCATCAGAGAGTAGCTAG

View online »

5' Read Nucleotide Sequence:

```
>OriGene 5' read for NM_170775 unedited
GCACGAGGACAACCTGGCGCTCTATGGAACCGGCGGCGGAGGCAGCACTGGAGGAGGCGG
CGGCGGTGGCGGGAGCGGGCACGGCAGCAGCAGTGGCACCAAGTCCAGCAAAAAGAAAAA
CCAGAACATCGGCTACAAGCTGGGCCACCGGCGCGCCCTGTTCGAAAAGCGCAAGCGGCT
CAGCGACTACGCGCTCATCTTCGGCATGTTCGGCATCGTGGTCATGGTCATCGAGACCGA
GCTGTCGTGGGGCGCCTACGACAAGGCGTCGCTGTATTCCTTAGCTCTGAAATGCCTTAT
CAGTCTCTCCACGATCATCCTGCTCGGTCTGATCATCGTGTACCACGCCAGGGAAATACA
GGTACCATGATCAACAGGATGTTACTAGCAACTTCCTTGGAGCGATGTGGTTGATATCAA
TAACTTTTCTCTCCATTGGTTATGGTGACATGGTACCTAACACATACTGTGGAAAAGGAG
TCTGCTTACTTACTGGAATTATGGGTGCTGGTTGCACAGCCCTGGTGGTAGCTGTAGTGG
CAAGGAAGCTAGAACTTACCAAAGCAGAANAACACGTGCACAATTTCATGATGGATACTC
AGCTGACTAAAAGAGTAAAAAATGCAGCTGCCAATGTACTCAGG
```

Restriction Sites: NotI-NotI

ACCN: NM_170775

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_170775.1, NP_740721.1

RefSeq Size: 1457 bp

RefSeq ORF: 696 bp

Locus ID: 3781

UniProt ID: Q9H2S1

Cytogenetics: 5q22.3

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

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 (2) differs in the 5' UTR and 5' coding region and initiates translation at a downstream start codon, compared to variant 1. Variants 2 and 3 encode the same isoform (b), which is shorter at the N-terminus compared to isoform a.