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Product datasheet for SC302049

KCNK2 (NM_001017424) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNK2 (NM_001017424) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNK2
Synonyms:	hTREK-1c; hTREK-1e; K2p2.1; TPKC1; TREK; TREK-1; TREK1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF sequence for NM_001017424 edited
ATGATGAACCCACGAGCAAAAAGGGATTTCTACTTGGCGGCACCTGACTTGCTGGATCCT
AAATCTGCCGCTCAGAACTCCAAACCGAGGCTCTCGTTTTCCACGAAACCCACAGTGCTT
GCTTCCCGGGTGGAGAGTGACACGACCATTAATGTTATGAAATGGAAGACGGTCTCCACG
ATATTCCTGGTGGTTGTCCTCTATCTGATCATCGGAGCCACCGTGTTCAAAGCATTGGAG
CAGCCTCATGAGATTTCACAGAGGACCACCATTGTGATCCAGAAGCAAACATTCATATCC
CAACATTCCTGTGTCAATTCGACGGAGCTGGATGAACTCATTCAGCAAATAGTGGCAGCA
ATAAATGCAGGGATTATACCGTTAGGAAACACCTCCAATCAAATCAGTCACTGGGATTTG
GGAAGTTCCTTCTTCTTTGCTGGCACTGTTATTACAACCATAGGATTTGGAAACATCTCA
CCACGCACAGAAGGCGGCAAAATATTCTGTATCATCTATGCCTTACTGGGAATTCCCCTC
TTTGGTTTTCTCTTGGCTGGAGTTGGAGATCAGCTAGGCACCATATTTGGAAAAGGAATT
GCCAAAGTGGAAGATACGTTTATTAAGTGGAATGTTAGTCAGACCAAGATTCGCATCATC
TCAACAATCATATTTATACTATTTGGCTGTGTACTCTTTGTGGCTCTGCCTGCGATCATA
TTCAAACACATAGAAGGCTGGAGTGCCCTGGACGCCATTTATTTTGTGGTTATCACTCTA
ACAACTATTGGATTTGGTGACTACGTTGCAGGTGGATCCGATATTGAATATCTGGACTTC
TATAAGCCTGTCGTGTGGTTCTGGATCCTTGTAGGGCTTGCTTACTTTGCTGCTGTCCTG
AGCATGATTGGAGATTGGCTCCGAGTGATATCTAAAAAGACAAAAGAAGAGGTGGGAGAG
TTCAGAGCACACGCTGCTGAGTGGACAGCCAACGTCACAGCCGAATTCAAAGAAACCAGG
AGGCGACTGAGTGTGGAGATTTATGACAAGTTCCAGCGGGCCACCTCCATCAAGCGGAAG
CTCTCGGCAGAACTGGCTGGAAACCACAATCAGGAGCTGACTCCTTGTAGGAGGACCCTG
TCAGTGAACCACCTGACCAGCGAGAGGGATGTCTTGCCTCCCTTACTGAAGACTGAGAGT
ATCTATCTGAATGGTTTGACGCCACACTGTGCTGGTGAAGAGATTGCTGTGATTGAGAAC
ATCAAATAG

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001017424 unedited
TCACATATTTGTATACGACTCATATAGGGCGGCCGCGAATTCGCACGAGGATGATGAACC
CACGAGCAAAAAGGATTTCTACTTGGCGGCACCTGACTTGCTGGATCCTAAATCTGCCGC
TCAGAACTCCAAACCGAGGCTCTCGTTTTCCACGAAACCCACAGTGCTTGCTTCCCGGGT
GGAGAGTGACACGACCATTAATGTTATGAAATGGAAGACGGTCTCCACGATATTCCTGGT
GGTTGTCCTCTATCTGATCATCGGAGCCACCGTGTTCAAAGCATTGGAGCAGCCTCATGA
GATTTCACAGAGGACCACCATTGTGATCCAGAAGCAAACATTCATATCCCAACATTCCTG
TGTCAATTCGACGGAGCTGGATGAACTCATTCAGCAAATAGTGGCAGCAATAAATGCAGG
GATTATACCGTTAGGAAACACCTCCAATCAAATCAGTCACTGGGATTTGGGAAGTTCCTT
CTTCTTTGCTGGCACTGTTATTACAACCATAGGATTTGGAAACATCTCACCACGCACAGA
AGGCGGCAAAATATTCTGTATCATCTATGCCTTACTGGGAATTCCCCTCTTTGGTTTTCT
CTTGGCTGGAGTTGGAGATCAGCTAGGCACCATATTTGGAAAAGGAATTGCCAAAGTGGA
AGATACGTTTATTAAGTGGAATGTTAGTCAGACCAAGATTCGCATCATCTCAACAATCAT
ATTTATACTATTTGGNCTGTGTACCTCTTTGTGGCTCTGCCTGCGATCATATTCAAACCA
TAGAAAGCTGNAGTGCCCTGGACGCCATTATTTTTGTGGTATCACTCTAACACCTATTGG
ATTTGGTGACTACGTTGCAGGTGGATCCGATATTGAATATCTGGGACTTCTTAAACCTGT
CCTGGGGGTCCTGGACCCT

3' Read Nucleotide Sequence:

>Forward primer walk for NM_001017424 unedited
GTAGACGCCTCCCAGTGAGATGGATCAAAGGTGTTGGGTTGGAATCGCTAGGCACCATAT
TTGGAAAAGGAATTGCCAAAGTGGAAGATACGTTTATTAAGTGGAATGTTAGTCAGACCA
AGATTCGCATCATCTCAACAATCATATTTATACTATTTGGCTGTGTACTCTTTGTGGCTC
TGCCTGCGATCATATTCAAACACATAGAAGGCTGGAGTGCCCTGGACGCCATTTATTTTG
TGGTTATCACTCTAACAACTATTGGATTTGGTGACTACGTTGCAGGTGGATCCGATATTG
AATATCTGGACTTCTATAAGCCTGTCGTGTGGTTCTGGATCCTTGTAGGGCTTGCTTACT
TTGCTGCTGTCCTGAGCATGATTGGAGATTGGCTCCGAGTGATATCTAAAAAGACAAAAG
AAGAGGTGGGAGAGTTCAGAGCACACGCTGCTGAGTGGACAGCCAACGTCACAGCCGAAT
TCAAAGAAACCAGGAGGCGACTGAGTGTGGAGATTTATGACAAGTTCCAGCGGGCCACCT
CCATCAAGCGGAAGCTCTCGGCAGAACTGGCTGGAAACCACAATCAGGAGCTGACTCCTT
GTAGGAGGACCCTGTCAGTGAACCACCTGACCAGCGAGAGGGATGTCTTGCCTCCCTTAC
TGAAGACTGAGAGTATCTATCTGAATGGTTTGACGCCACACTGTGCTGGTGAAGAGATTG
CTGTGATTGAGAACATCAAATAGCCCTCTCTTTAAATAACCTTAGGCATAGCCATAGGTG
AGGACTTCTCTATGCTCTTTATGACTGTTGCTGGTAGCATTTTTTAAATTGTGCATGAGC
TCAAAGGGGGAACAAAATAGATACACCCATCATGGTCATCTATCATCAGAGATTTGGAAT
TCTGAGCCAGCCCTTTCTTTCTGATGATGCTTGTTGGAACCGGTTCCACTTCCT

Restriction Sites: Please inquire

ACCN: NM_001017424

Insert Size: 3200 bp

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).

OTI Annotation: The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

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_001017424.1, NP_001017424.1
RefSeq Size:	3340 bp
RefSeq ORF:	1269 bp
Locus ID:	3776
UniProt ID:	O95069
Cytogenetics:	1q41
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	This gene encodes one of the members of the two-pore-domain background potassium channel protein family. This type of potassium channel is formed by two homodimers that create a channel that leaks potassium out of the cell to control resting membrane potential. The channel can be opened, however, by certain anesthetics, membrane stretching, intracellular acidosis, and heat. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) encodes the longest isoform (a).