

## Product datasheet for **RC213176**

### **KCNK2 (NM\_001017425) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCNK2 (NM_001017425) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNK2
Synonyms:	hTREK-1c; hTREK-1e; K2p2.1; TPKC1; TREK; TREK-1; TREK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC213176 representing NM\_001017425  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTTCCAGCGCCTCGCGGGAGAGACCCGGCTATAGAGCAGGAGTGGCGGCACCTGACTTGTGGATC  
 CTAATCTGCCGCTCAGAACTCCAAACCGAGGCTCTCGTTTTCCACGAAACCCACAGTGCTTGTCCCG  
 GGTGGAGAGTGACACGACCATAATGTTATGAAATGGAAGACGGTCTCCACGATATTCCTGGTGGTTGTC  
 CTCTATCTGATCATCGGAGCCACCGTGTCAAAGCATTGGAGCAGCCTCATGAGATTTACACAGGACCA  
 CCATTGTGATCCAGAAGCAAACATTCATATCCCAACATTCCTGTGTCAATTCGACGGAGCTGGATGAACT  
 CATTGAGCAAATAGTGGCAGCAATAATGCAGGGATTATACCGTTAGGAAACACCTCCAATCAAATCAGT  
 CACTGGGATTTGGGAAGTTCCTTCTTTGCTGGCACTGTTATTACAACCATAGGATTTGGAAACATCT  
 CACCACGCACAGAAGGCCGCAAAATATTCTGTATCATCTATGCCTTACTGGGAATCCCCTTTTGGTTT  
 TCTCTTGGCTGGAGTTGGAGATCAGCTAGGCACCATATTTGAAAAGGAATTGCCAAAGTGAAGATACG  
 TTTATTAAGTGAATGTTAGTCAGACCAAGATTCGCATCATCTCAACAATCATATTTATACTATTTGGCT  
 GTGACTCTTTGTGGCTCTGCCTGCGATCATATCAAACACATAGAAGGCTGGAGTGCCTGGACGCCAT  
 TATTTTGTGGTTATCACTCTAACTAATTTGGATTTGGTACTACGTTGCAGGTGGATCCGATATTGAA  
 TATCTGGACTTCTATAAGCCTGTCGTGTGGTCTGGATCCTTGTAGGGCTTGCTTACTTTGCTGCTGTC  
 TGAGCATGATTGGAGATTGGCTCCGAGTGATATCTAAAAAGACAAAAGAAGAGGTGGGAGAGTTCAGAGC  
 ACACGCTGCTGAGTGGACAGCCAACGTCACAGCCGAATTCAAAGAAACAGGAGGCGACTGAGTGTGGAG  
 ATTTATGACAAGTCCAGCGGCCACCTCCATCAAGCGGAAGCTCTCGGCAGAACTGGCTGGAAACCACA  
 ATCAGGAGCTGACTCCTTGTAGGAGGACCCTGTGAGTGAACACCTGACCAGCGAGAGGGATGCTTGGCC  
 TCCTTACTGAAGACTGAGAGTATCTATCTGAATGGTTTGACGCCACACTGTGCTGGTGAAGAGATTGCT  
 GTGATTGAGAACATCAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213176 representing NM\_001017425  
 Red=Cloning site Green=Tags(s)

MLPSASRERPGYRAGVAAPDLLDPKSAAQNSKPRLSFSTKPTVLSRVESDITINVMKWTVSTIFLVV  
 LYLIIIGATVFKALEQPHEISQRTTIVIQKQTFISQHSVCNSTELDELIQQIVAAINAGIPLGNTSNQIS  
 HWDLGSSFFFAGTVITTTIGFNI SPRTTEGGKIFCIIYALLGIPLFGFLLAGVGDQLGTIFGKGIKVEDT  
 FIKWNVSTKIRIISTIIIFILFGCVLFVALPAIIFKHIEGWSALDAIYFVVITLTTIGFGDYVAGGSDIE  
 YLDFYKPVVWFILVGLAYFAAVLSMIGDWLRVISKKTKEEVGEFRAHAAEWANVTAEFKETRRLSVE  
 IYDKFQRATSIKRKLSAELAGNHQELTPCRRTLSVNHLTSERDVLPLLKTESIYLNGLTPHCAGEEIA  
 VIENIK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8059\\_a05.zip](https://cdn.origene.com/chromatograms/mk8059_a05.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001017425

**ORF Size:** 1278 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_001017425.3](#)

**RefSeq Size:** 3398 bp

**RefSeq ORF:** 1281 bp

**Locus ID:** 3776

**UniProt ID:** [O95069](#)

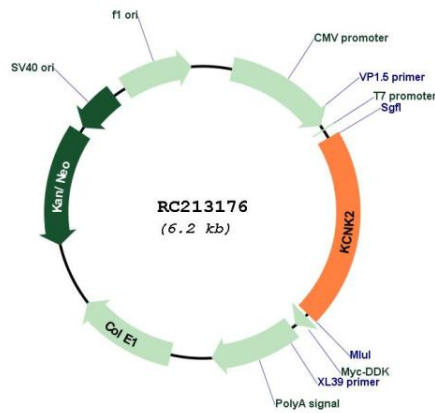
**Cytogenetics:** 1q41

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

**MW:** 46.9 kDa

**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]

**Product images:**



Circular map for RC213176