

Product datasheet for **RG210180**

KCNK2 (NM_014217) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNK2 (NM_014217) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNK2
Synonyms:	hTREK-1c; hTREK-1e; K2p2.1; TPKC1; TREK; TREK-1; TREK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210180 representing NM_014217 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCACCTGACTTGCTGGATCCTAAATCTGCCGCTCAGAACTCCAAACCGAGGCTCTCGTTTTCCA
CGAAACCCACAGTGCTTGCTTCCCGGTGGAGAGTGACACGACCATTAATGTTATGAAATGGAAGACGGT
CTCCACGATATTCCTGGTGGTTGCTCTATCTGATCATCGGAGCCACCGTGTCAAAGCATTGGAGCAG
CCTCATGAGATTCACAGAGGACCACCATTGTGATCCAGAAGCAAACATTCATATCCAACATTCCTGTG
TCAATTCGACGGAGCTGGATGAACTCATTAGCAAAATAGTGGCAGCAATAAATGCAGGGATTATACCGTT
AGGAAACACCTCCAATCAAATCAGTCACCTGGGATTTGGGAAGTTCCTTCTTTGCTGGCACTGTTATT
ACAACCATAGGATTTGGAACATCTCACACGCACAGAAGCGCGCAAAATATTCTGTATCATCTATGCCT
TACTGGGAATTCCTCTTTGGTTTTCTTGGCTGGAGTTGGAGATCAGCTAGGCACCATATTTGGAAA
AGGAATTGCCAAAGTGAAGATACGTTTAAAGTGAATGTTAGTCAGACCAAGATTCGCATCATCTCA
ACAATCATATTTATACTATTTGGCTGTGACTCTTTGGCTCTGCCTGCGATCATATTCAAACACATAG
AAGGCTGGAGTGCCCTGGACGCCATTTATTTGTGGTTATCACTTAACAATATTGGATTTGGTGACTA
CGTTGCAGGTGGATCCGATATTTGAATATCTGGACTTCTATAAGCCTGTCGTGTGGTTCTGGATCCTTGA
GGGCTTGCTTACTTTGCTGCTGCTGAGCATGATTGGAGATTGGCTCCGAGTGATATCTAAAAAGACAA
AAGAAGAGGTGGGAGAGTTCAGAGCACACGCTGCTGAGTGGACAGCCAAGTCCAGCCGAATTCAAAGA
AACCAGGAGGCGACTGAGTGTGGAGATTTATGACAAGTCCAGCGGGCCACCTCCATCAAGCGGAAGCTC
TCGGCAGAACTGGCTGGAACCAATCAGGAGCTGACTCCTTGTAGGAGGACCCTGTCAGTGAACCACC
TGACCAGCGAGAGGGATGCTTGCCTCCCTTACTGAAGACTGAGAGTATCTATCTGAATGGTTTGACGCC
ACACTGTGCTGGTGAAGAGATTGCTGTGATTGAGAATCAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG210180 representing NM_014217
 Red=Cloning site Green=Tags(s)

MAAPDLLDPKSAQNSKPRLSFSTKPTVLASRVESDTTINVMKWKTVSTIFLVVVLVLIIGATVFKALEQ
 PHEISQRTTIVIQKQTFISQHSVCNSTELDELIQQIVAANAGIPLGNTSNQISHWDLGSSFFAGTVI
 TTIGFGNISPRTEGGKIFCIIYALLGIPLFGLLAGVGDQLGTIFGKGIKVEDTFIKWNVSQTKIRIIS
 TIIFILFGCVLFVALPAIFKHIEGWSALDAIYFVVITLTTIGFDYVAGGSDIEYLDYKPVVWFILV
 GLAYFAAVLSMIGDWRVLSKKTKEEVGEFRAHAAEWTANVTAEFKETRRRLSVEIYDKFQRATSIKRKL
 SAELAGNHNQELTPCRRTLSVNHLTTSERDVLPLLKTESIYLNGLTPHCAGEEIAVIENIK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014217

ORF Size: 1233 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_014217.4](#)

RefSeq Size: 3198 bp

RefSeq ORF: 1236 bp

Locus ID: 3776

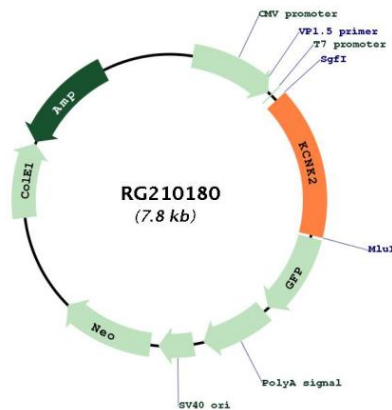
UniProt ID: [O95069](#)

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]

Product images:



Circular map for RG210180