

## Product datasheet for **RG213176**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KCNK2 (NM\_001017425) 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:** >RG213176 representing NM\_001017425  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTTCCCAGCGCCTCGCGGGAGAGACCCGGCTATAGAGCAGGAGTGCGGCACCTGACTTGCTGGATC  
 CTAATCTGCCGCTCAGAACTCCAACCGAGGCTCTCGTTTTCCAGAAACCCACAGTGCTTGCTTCCC  
 GGTGGAGAGTGACACGACCATTAATGTTATGAAATGGAAGACGGTCTCCACGATATTCCTGGTGGTTGTC  
 CTCTATCTGATCATCGGAGCCACCGTGTCAAAGCATTGGAGCAGCCTCATGAGATTCACAGAGGACCA  
 CCATTGTGATCCAGAAGCAAACATTCATATCCCAACATTCCTGTGTCAATTCGACGGAGCTGGATGAACT  
 CATTTCAGCAAATAGTGGCAGCAATAAATGCAGGGATTATACCGTTAGGAAACACCTCCAATCAAATCAGT  
 CACTGGGATTTGGGAAGTTCCTTCTTTGCTGGCACTGTTATTACAACCATAGGATTTGGAAACATCT  
 CACCACGCACAGAAGCGGCAAAATATTCTGTATCATCTATGCCTTACTGGGAATCCCCTCTTTGGTTT  
 TCTCTTGGCTGGAGTTGGAGATCAGCTAGGCACCATATTTGGAAAAGGAATTGCCAAAGTGGAGATACG  
 TTTATTAAGTGGAAATGTTAGTCAGACCAAGATTCGCATCATCTCAACAATCATATTTATACTATTTGGCT  
 GTGTACTCTTTGGCTCTGCCTGCGATCATATCAAACATAGAAGGCTGGAGTGCCTGGACGCCAT  
 TTATTTTGTGGTTATCACTCTAACAACATTTGGATTTGGTGACTACGTTGAGGTGGATCCGATATTGAA  
 TATCTGGACTTCTATAAGCCTGTCGTGTGGTTCTGGATCCTGTAGGGCTTGCTTACTTTGCTGCTGTCC  
 TGAGCATGATTGGAGATTGGCTCCGAGTGATATCTAAAAAGACAAAAGAAGAGGTGGGAGAGATTCAGAGC  
 ACACGCTGCTGAGTGGACAGCCAACGTCACAGCCGAATTCAAAGAAACAGGAGGCGACTGAGTGTGGAG  
 ATTTATGACAAGTTCAGCGGGCCACCTCCATCAAGCGGAAGCTCTCGGCAGAACTGGCTGGAAACCA  
 ATCAGGAGCTGACTCCTTGTAGGAGGACCTGTGAGTGAACACCTGACCAGCGAGAGGGATGCTTGGC  
 TCCCTTACTGAAGACTGAGAGTATCTATCTGAATGTTTGACGCCACACTGTGCTGGTGAAGAGATTGCT  
 GTGATTGAGAATCAAA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG213176 representing NM\_001017425  
 Red=Cloning site Green=Tags(s)

MLPSASRERPGYRAGVAAPDLLDPKSAQNSKPRLSFSTKPTVLSRVESDTTINVMKWKTVSTIFLVV  
 LYLIIGATVFKALEQPHEISQRTTIVIQKQTFISQHSCVNSTELDELIQQIVAAINAGIPLGNTSNQIS  
 HWDLGSSFFAGTVITTTIGFNGISPRTEGGKIFCIIYALLGIPLFGFLLAGVGDQLGTIFGKGIKVEDT  
 FIKWNVSQTKIRIISTIIIFILFGCVLFVALPAIIFKHIEGWSALDAIYFVVITLTTIGFGDYVAGGSDIE  
 YLDFYKPVVFWILVGLAYFAAVLSMIGDWLRVISKKTKEEVGEFRAHAAEWANVTAEFKETRRRLSVE  
 IYDKFQRATSIKRKLSAELAGNHNQELTPCRRTLSVNHLT SERDVL PPLLKTESIYLNGLTPHCAGEEIA  
 VIENIK

TRTRPLE - GFP Tag - V

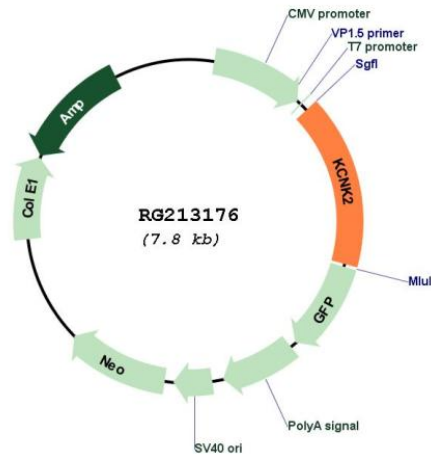
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001017425

<b>ORF Size:</b>	1278 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001017425.3</a>
<b>RefSeq Size:</b>	3398 bp
<b>RefSeq ORF:</b>	1281 bp
<b>Locus ID:</b>	3776
<b>UniProt ID:</b>	<a href="#">O95069</a>
<b>Cytogenetics:</b>	1q41
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Potassium, Transmembrane
<b>Gene Summary:</b>	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]