

## Product datasheet for RC202421

### KCNK6 (NM\_004823) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNK6 (NM_004823) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNK6
Synonyms:	K2p6.1; KCNK8; TOSS; TWIK-2; TWIK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202421 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGAGGGGCGCCTTCTGGCGGGCCCTTGCCCGGTACGCCCGTACCTGGTGTGGGCGCGCTGT  
TGGTGGCGCGGCTGGAGGGGCCGACGAAGCCAGGCTCCGAGCCGAGCTGGAGACGCTGCGGGCGCAGCT  
GCTTCAGCGCAGCCCGTGTGGCTGCCCCGCCCTGGACGCCTTCGTGGAGCGAGTGTGGCGGCCGA  
CGGCTGGGGCGGGTCGTGCTTGTAAACGCTTCGGGTCCGCCAACGCCTCGGACCCCGCCTGGGACTTCG  
CCTCTGCTCTCTTCCGCCAGCAGCTGATCACCACCGTGGGCTATGGGTACACAACGCCACTGACTGA  
TGGCGGCAAGGCCTTCTCCATCGCCTTTGCGCTCCTGGGCGTGCCGACCACCATGCTGCTGCTGACCGCC  
TCAGCCCAGCGCCTGTCAGTCTGCTGACTCACGTGCCCTGTCTTGGCTGAGCATGCGTTGGGGCTGGG  
ACCCCCGGCGGGCGGCTGCTGGCACTTGGTGGCCCTGTTGGGGTGTAGTGACCGTCTGCTTTCTGGT  
GCCGGCTGTGATCTTTGCCACCTCGAGGAGGCTGGAGCTTCTTGGATGCCTTCTACTTCTGCTTTATC  
TCTCTGTCCACCATCGGCTGGGCGACTACGTGCCGGGAGGCCCTGGCCAGCCCTACCGGGCCCTCT  
ACAAGGTGCTGGTACAGTCTACCTCTTCTGGGCTGGTGGCCATGGTGTGCTGCTGCAGACCTCCG  
CCACGTGTCGACCTCCACGGCTCACGGAGCTCATCTGCTGCCCTCCGTCGCCCTGCCAGTTTCAAT  
GCGGATGAGGACGATCGGGTGGACATCTGGGCCCGAGCGGAGTCGCACCAGCAACTCTGCCAGCT  
CCCACACCGACTACGCTTCCATCCCCAGG

**ACGCGT**ACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC202421 protein sequence  
Red=Cloning site Green=Tags(s)

MRRGALLAGALAAAYAAYLVLGALLVARLEGPHEARLRAELETTRAQLLQRSPCVAAPALDAFVERVLAAG  
 RLGRVVLANASGSANASDPADFASALFFASTLITTVGYGTTPLTDAGKAFSIAFALLGVPTTMLLLTA  
 SAQRLSLLLTHVPLSWLSMRWGWDPRAACWHLVALLGVVVTVCFLVPAVIFAHLEEAWSFLDAFYFCFI  
 SLSTIGLDYVPGAPGQPYRALYKVLVTVYFLGLVAMVVLVQTFRHVSDLHGLTELILLPPPCPASFN  
 ADEDDRVDILGPQPEHQQLSASSHTDYASIPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6193\\_f05.zip](https://cdn.origene.com/chromatograms/mk6193_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_004823

**ORF Size:** 939 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_004823.3](#)

**RefSeq Size:** 2671 bp

**RefSeq ORF:** 942 bp

**Locus ID:** 9424

**UniProt ID:** [Q9Y257](#)

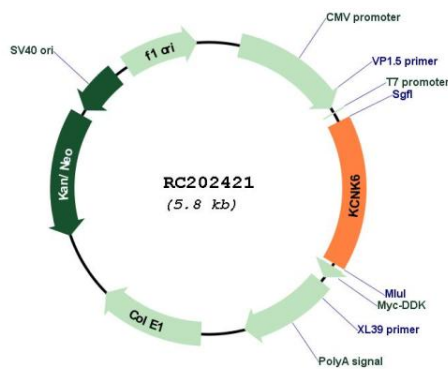
**Cytogenetics:** 19q13.2

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

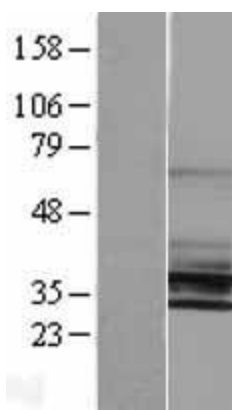
**MW:** 33.7 kDa

**Gene Summary:** This gene encodes one of the members of the superfamily of potassium channel proteins containing two pore-forming P domains. This channel protein, considered an open rectifier, is widely expressed. It is stimulated by arachidonic acid, and inhibited by internal acidification and volatile anaesthetics. [provided by RefSeq, Jul 2008]

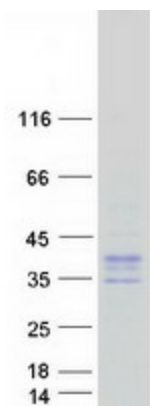
**Product images:**



Circular map for RC202421



Western blot validation of overexpression lysate (Cat# [LY401515]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202421 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KCNK6 protein (Cat# [TP302421]). The protein was produced from HEK293T cells transfected with KCNK6 cDNA clone (Cat# RC202421) using MegaTran 2.0 (Cat# [TT210002]).