

Product datasheet for **MC227571**

Kcnk2 (NM_001281847) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kcnk2 (NM_001281847) Mouse Untagged Clone
Tag: Tag Free
Symbol: Kcnk2
Synonyms: A430027H14Rik; AI848635; TREK-1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC227571 representing NM_001281847
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGTGCAGTGGCGGCCCTGACTTGCTGGATCCCAAGTCTGCTGCTCAGAAGTCCAAACCGAGGCTCT
CATTCTCCTCAAACCCACCGTCTTGGCTCCCGGGTGGAGAGTACTCGGCCATTAATGTTATGAAATG
GAAGACAGTCTCCACGATTTTCCTGGTGGTCTGCTCTACCTGATCATCGGAGCCACGGTGTCAAGGCA
TTGGAGCAGCCTCAGGAGATTTCCAGAGGACCACCATTTGTGATCCAGAAGCAGACCTTCATAGCCAGC
ATGCCTGCGTCAACTCCACCGAGCTGGACGAACTCATCCAGCAAATAGTGGCAGCAATAAACGCAGGGAT
TATCCCCTTAGGAAACAGCTCCAATCAAGTTAGTCACTGGGACCTCGGAAGCTCTTTCTTCTTGGCTGGT
ACTGTTATCACAACCATAGGATTTGAAACATCTCCACGAACTGAAGGTGGAAAAATATTCTGCATCA
TCTATGCCTTGTGGGAATTCCTCTTTGGCTTTCTACTGGCTGGGGTTGGTGTACAGTAGGAACTAT
ATTTGGAAAAGGAATTGCCAAAGTGAAGACACATTTATTAAGTGAATGTTAGTCAGACGAAGATTCGT
ATCATCTCCACCATCATCTTCATCCTGTTTGGCTGTGCTCTTTGTGGCTCTCCCTGCGGTATATTCA
AGCACATAGAAGGCTGGAGCGCCCTGGACGCTATCTATTTGTGGTTATCACTCTGACGACCATTTGGATT
TGGAGACTACGTGGCAGGTGGATCAGACATTGAATATCTGGACTTCTACAAGCCTGTGGTGTGGTTCTGG
ATCCTCGTTGGGCTGGCCTACTTTGACGCTGTTCTGAGCATGATTGGGACTGGCTACGGGTGATCTCTA
AGAAGACGAAGGAAGAGGTGGGAGAGTTGAGAGCGCATGCCGCTGAGTGGACAGCCAATGTCACGGCCGA
GTTCAAGGAAACGAGGAGGCGGCTGAGCGTGGAGATCTACGACAAGTCCAGCGTGCCACATCCGTGAAG
CGGAAGCTCTCCGACAGCTGGCGGCAACCACAACCAGGAACTGACTCCGTGTAGGAGGACCCTGTCTG
TGAACCACCTGACCAGCGAGAGGGAAGTCTGCCTCCCTTGTGAAGGCTGAGAGCATCTATCTGAACGG
TCTGACACCACACTGTGCTGGTGGAGACATAGCTGTCATTGAGAACATGAAGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001281847
Insert Size:	1245 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:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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:	<u>NM_001281847.1</u> , <u>NP_001268776.1</u>
RefSeq Size:	3314 bp
RefSeq ORF:	1245 bp
Locus ID:	16526
Cytogenetics:	1 H6
Gene Summary:	<p>Ion channel that contributes to passive transmembrane potassium transport. Reversibly converts between a voltage-insensitive potassium leak channel and a voltage-dependent outward rectifying potassium channel in a phosphorylation-dependent manner. In astrocytes, forms mostly heterodimeric potassium channels with KCNK1, with only a minor proportion of functional channels containing homodimeric KCNK2 (PubMed:24496152). In astrocytes, the heterodimer formed by KCNK1 and KCNK2 is required for rapid glutamate release in response to activation of G-protein coupled receptors, such as F2R and CNR1 (PubMed:24496152). [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (3) uses an alternate 5' terminal exon and thus differs in the 5' UTR and 5' coding region compared to variant 1. The resulting isoform (3) has a shorter and distinct N-terminus compared to isoform 1.</p>