

## Product datasheet for **MC227064**

### **Kcnk2 (NM\_001281848) Mouse Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Kcnk2 (NM\_001281848) 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:** >MC227064 representing NM\_001281848  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAAGACAGTCTCCACGATTTCTGGTGGTCGTCCTACCTGATCATCGGAGCCACGGTGTCAAG  
GCATTGGAGCAGCCTCAGGAGATTTCCAGAGGACCACCATTGTGATCCAGAAGCAGACCTTCATAGCCC  
AGCATGCCTGCGTCAACTCCACCGAGCTGGACGAACCTATCCAGGATTTGGAAACATCTCCACGAACT  
GAAGGTGGAAAAATATTCTGCATCATCTATGCCTTGCTGGGAATTCGCCCTTTGGCTTTCTACTGGCTG  
GGTGGTGATCAGCTAGGAACATATTTGGAAAAGGAATTGCCAAAGTGAAGACACATTTATTAAGTG  
GAATGTTAGTCAGACGAAGATTCGTATCATCTCCACCATCATCTTCATCCTGTTGGCTGTGTCCTCTTT  
GTGGCTCTCCCTGCGGTCAATTTCAAGCACATAGAAGGCTGGAGCGCCCTGGACGCTATCTATTTGTGG  
TTACTACTCTGACGACCATTGGATTTGGAGACTACGTGGCAGGTGGATCAGACATTGAATATCTGGACTT  
CTACAAGCCTGTGGTGTGGTTCTGGATCCTCGTTGGGCTGGCCTACTTTGCAGCTGTTCTGAGCATGATT  
GGGACTGGCTACGGGTGATCTTAAGAAGACGAAGGAAGAGGTGGGAGAGTTAGAGCGCATGCCGCTG  
AGTGGACAGCCAATGTCACGGCCGAGTTCAAGGAAACGAGGAGCGGCTGAGCGTGGAGATCTACGACAA  
GTTCCAGCGTGCCACATCCGTGAAGCGGAAGCTCTCCGCAGAGCTGGCGGCAACCACAACCAGGAACTG  
ACTCCGTGTAGGAGGACCCTGTCTGTGAACCACCTGACCAGCGAGAGGGAAGTCCTGCCTCCCTTGTCTGA  
AGGCTGAGAGCATCTATCTGAACGGTCTGACACCACACTGTGCTGGTGGAGCATAGCTGTCATTGAGAA  
CATGAAGTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001281848



[View online »](#)

<b>Insert Size:</b>	990 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<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>	<u>NM_001281848.1, NP_001268777.1</u>
<b>RefSeq Size:</b>	3155 bp
<b>RefSeq ORF:</b>	990 bp
<b>Locus ID:</b>	16526
<b>Cytogenetics:</b>	1 H6
<b>Gene Summary:</b>	<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 (4) differs in the 5' UTR and has multiple differences in the coding region. The encoded isoform (4) has a distinct N-terminus and is shorter than isoform 1.</p>