

## Product datasheet for **MC221284**

### **Kcnq2 (NM\_001006668) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001006668) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kcnq2
Synonyms:	HNSPC; KQT2; Nmf134
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >MC221284 representing NM\_001006668  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCGGCACAGCGGGGAAAAGAAGCTCAAGTGGGCT  
 TCGTGGGCTGGACCCCGCGCGCCGACTCCACACGCGACGGCGGCTACTCATCGCGGCTCCGAGGC  
 CCCAAGCGCGGAGCGTTTTGAGCAAGCCGCGACGGCGCGGGAGCCGGGAAAGCCCCGAAGCGC  
 AACGCCTTCTACCGCAAGCTGCAGAATTTCTCTACAACGTGCTAGAGCGGCCCGCGGCTGGCGTTCA  
 TCTACCACGCCTACGTGTTCTTTAGTCTTCTCTGCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA  
 GTACGAGAAGAGCTCTGAGGGGGCCCTACATCTTGAAATCGTACTATCGTGTATTCTGGTGTGAG  
 TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGTATCGAGGCTGGAGGGCAGGCTCAAGTTG  
 CCAGGAAGCCGTTCTGTGTGATTGATATCATGGTGTGATTGCCTCCATTGCTGTGCTGGCTGCTGGTTC  
 CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGGGTTCTTGCAAATCTTGGGATGATCCGT  
 ATGGACCGGAGGGGTGGCACCTGGAAGCTCTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA  
 CTGCCTGGTACATTGGCTTCTCTGCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA  
 GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGCTGATCACCTGACGACCATTTGGCTAC  
 GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTACCCTCATTGGTGTCTCGT  
 TCTTTGCTCTTCTGTGGCATTTTGGGATCCGGCTTGGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA  
 ACACCTTGAGAAACGGCGGAACCTGCGGCAAGTCTGATCCAGTTCGCTGGAGATTCTATGCTACTAAC  
 CTCTCACGCCACCGACCTGCATCCAGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGAC  
 TCATCCCACCTCTGAACCAGCTGGAGCTGCTGAGGAATCTCAAGAGCAAATCTGGACTCACCTTCAGGAA  
 GGAGCCACAGCCAGAGCCATCACCAAGCCCGGAGGATGGCTGCCAAGGAAAGGGTCTCCCCAGGCC  
 CAGACGGTCCGGCGGTCCCCAGTGCAGGATCAGAGTCTTGATGACAGCCGAGCAAGGTGCCAAGAGCT  
 GGAGCTTTGGTACCAGCGCACAGCCAGGCTTTCGCATCAAGGGTGTGATCCCCGAGAAATTC  
 AGAAGAAGCAAGCCTCCCTGGGGAGGACATCGTAGAGGACAACAAGAGCTGTAAGTGCAGTTTTGTGACT  
 GAAGATCTTACCCTGGCCTCAAAGTTAGCATCAGAGCTGTGTGTTATGCGGTTCTTGGTATCTAAGC  
 GAAAGTCAAAGAGAGTCTGCGCCCATATGATGTGATGGACGTCATCGAACAGTACTCGGCTGGACACTT  
 GGATATGTTGCCGCATCAAGAGCCTGCAGTCCAGGATAGATATGATTGTGGGCCCCCACCCTTCA  
 ACTCCCCGGCACAAGAAGTACCCTACCAAGGACCCACGCCCCCTCGAGAGAGTCACCCAGTACTCAC  
 CTAGAGTGGACCAGATTGTGGGGCGGGCCCAACAATAACGGATAAGGACCGCACCAAAGGCCAGCGGA  
 AACGGAGCTGCCGAAGACCCAGCATGATGGGACGGCTTGGGAAGGTGGAGAAAAGGCTTTGTCCATG  
 GAAAAGAAGCTCGACTTCTTGGTGGATCTATACACAGAGAATGGGCATCCCACCAGCAGAGACAGAGG  
 CCTATTTTGGGGCAAGGAGCCTGAGCCGGCACCACCCTACCACAGCCAGAGGACAGCCGTGACCATGC  
 AGACAAGCATGGCTGTATCATTAAAGATCGTCCGCTCCACCAGCTTACGGGCCAGAGGAACACGCAGCA  
 CCCCCAGCCATCCCCCTGCCAGTGTCTCCCTCCACCTCGTGGCAGCAGAGCCACCAGCGCCATGGCA  
 CCTCCCCGTGGGAGACCATGGCTACTGGTCTGCGACTGGAGAGGAGTGTGGCATGATGAGCTGTCA  
**CTAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001006668  
**Insert Size:** 2244 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>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><a href="#">NM_001006668.2</a></u> , <u><a href="#">NP_001006669.1</a></u>
<b>RefSeq Size:</b>	3037 bp
<b>RefSeq ORF:</b>	2244 bp
<b>Locus ID:</b>	16536
<b>Cytogenetics:</b>	2 103.57 cM
<b>Gene Summary:</b>	<p>Associates with KCNQ3 to form a potassium channel with essentially identical properties to the channel underlying the native M-current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical excitability of neurons as well as the responsiveness to synaptic inputs. Therefore, it is important in the regulation of neuronal excitability.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (4) lacks two alternate in-frame exons but includes an additional in-frame exon, it uses an alternate in-frame splice site, and it also contains alternate 3' exon structure resulting in an alternate 3' coding region, compared to variant 1. The encoded isoform (4) has a distinct C-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>