OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR225340

Kcnq2 (NM_001006675) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001006675) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnq2
Synonyms:	HNSPC; KQT2; Nmf134
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR225340 representing NM_001006675
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCCGGCACCAGCGGGGAAAAGAAGCTCAAGGTGGGCT
TCGTGGGGCTGGACCCCGGCGCGCCCGACTCCACACGCGACGGCGCGCTACTCATCGCGGGCTCCGAGGC
CCCCAAGCGCGGCAGCGTTTTGAGCAAGCCGCGGACGGGCGGCGCGGGAGCCGGGAAGCCCCCGAAGCGC
AACGCCTTCTACCGCAAGCTGCAGAATTTCCTCTACAACGTGCTAGAGCGGCCCCGCGGCTGGGCGTTCA
TCTACCACGCCTACGTGTTCCTTTTAGTCTTCTCCTGCCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA
GTACGAGAAGAGCTCTGAGGGGGCCCTCTACATCTTGGAAATCGTGACTATCGTGGTATTCGGTGTTGAG
TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGGTATCGAGGCTGGAGGGGCAGGCTCAAGTTTG
CCAGGAAGCCGTTCTGTGTGATTGATATCATGGTGCTGATTGCCTCCATTGCTGTGCTGGCTGCTGGTTC
CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGCGGTTCTTGCAAATCTTGCGGATGATCCGT
ATGGACCGGAGGGGTGGCACCTGGAAGCTCTTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA
CTGCCTGGTACATTGGCTTCCTCTGCCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA
GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGGTCTGATCACCCTGACGACCATTGGCTAC
GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTTACCCTCATTGGTGTCTCGT
TCTTTGCTCTTCCTGCTGGCATTTTGGGATCCGGCTTTGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA
ACACTTTGAGAAACGGCGGAACCCTGCGGCAGGTCTGATCCAGTCTGCCTGGAGATTCTATGCTACTAAC
CTCTCACGCACCGACCTGCACTCCACGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGAC
TCATCCCACCTCTGAACCAGCTGGAGCTGCTGAGGAATCTCAAGAGCAAATCTGGACTCACCTTCAGGAA
GGAGCCACAGCCAGAGCCATCACCAAGTCAGAAGGTCAGTTTGAAAGATCGTGTCTTCTCCAGCCCCCGA
GGCATGGCTGCCAAGGGAAAGGGGTCTCCCCAGGCCCAGACGGTCCGGCGGTCCCCCAGTGCGGATCAGA
GTCTTGATGACAGCCCGAGCAAGGTGCCCAAGAGCTGGAGCTTTGGTGACCGCAGCCGCACACGCCAGGC
TTTCCGCATCAAGGGTGCTGCATCCCGGCAGAATTCAGAAGAAGCAAGCCTCCCTGGGGAGGACATCGTA
GAGGACAACAAGAGCTGTAACTGCGAGTTTGTGACTGAAGATCTTACCCCTGGCCTCAAAGTTAGCATCA
GAGCTGTGTGTGTTATGCGGTTCTTGGTATCTAAGCGAAAGTTCAAAGAGAGTCTGCGCCCATATGATGT
GATGGACGTCATCGAACAGTACTCGGCTGGACACTTGGATATGTTGTCCCGCATCAAGAGCCTGCAGTCC
AGGCAAGAGCCCCTGCCTGTCCAGTCTGGGCATGAACAGGGCCCTCCGGGACAAAACCAGGCATGGCACA
AGGGGCACCAAGGGCTGGGTGACAGGTGTGCAGAACAGGGCCAGTACCAGCTTTGGAGGTCTCTTCCCAC
CTTGTTGGCTTCTTGTTGCTTTCTGCTGTGTTTCCACACTGTCTGTTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

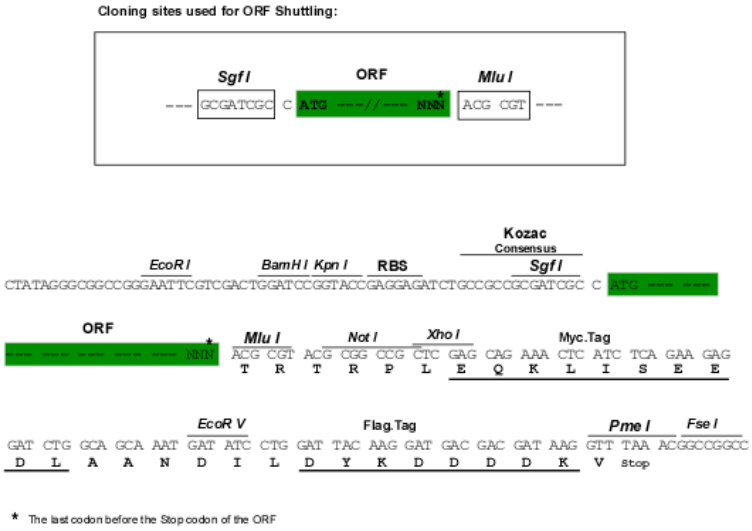
>MR225340 representing NM_001006675
Red=Cloning site Green=Tags(s)

MVQKSRNGGVYPGTSGEKKLKVGFVGLDPGAPDSTRDGALLIAGSEAPKRGSVLSKPRTGGAGAGKPPKR
NAFYRKLQNFLYNVLERPRGWAFIYHAYVFLLVFSCLVLSVFSTIKEYEKSSEGALYILEIVTIVVFGVE
YFVRIWAAGCCCRYRGWRGRLKFARKPFCVIDIMVLIASIAVLAAGSQGNVFATSALRSLRFLQILRMIR
MDRRGGTWKLLGSVVYAHSKELVTAWYIGFLCLILASFLVYLAEKGENDHFDTYADALWWGLITLTTIGY
GDKYPQTWNGRLLAATFTLIGVSFFALPAGILGSGFALKVQEQHRQKHFEKRRNPAAGLIQSAWRFYATN
LSRTDLHSTWQYYERTVTVPMYRLIPPLNQLELLRNLKSKSGLTFRKEPQPEPSPSQKVSLKDRVFSSPR
GMAAKGKGSPQAQTVRRSPSADQSLDDSPSKVPKSWSFGDRSRTRQAFRIKGAASRQNSEEASLPGEDIV
EDNKSCNCEFVTEDLTPGLKVSIRAVCVMRFLVSKRKFKESLRPYDVMDVIEQYSAGHLDMLSRIKSLQS
RQEPLPVQSGHEQGPPGQNQAWHKGHQGLGDRCAEQGQYQLWRSLPTLLASCCFLLCFHTVCF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001006675

ORF Size: 1869 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.

RefSeq: NM_001006675.1, NP_001006676.1

RefSeq Size: 2939 bp

RefSeq ORF: 1872 bp

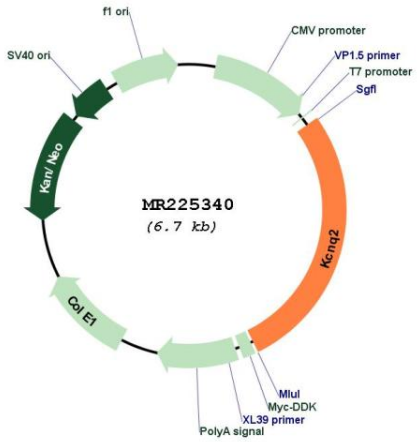
Locus ID: 16536

Cytogenetics: 2 103.57 cM

MW: 70.2 kDa

Gene Summary: 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]

Product images:



Circular map for MR225340