

Product datasheet for **MR225883**

Kcnc1 (NM_008421) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnc1 (NM_008421) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnc1
Synonyms:	C230009H10Rik; Kcr2-1; KShIIIB; Kv3.1; KV4; NGK2; Shaw
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR225883 representing NM_008421
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCCAAGGGGACGAGAGCGAGCGCATCGTGATCAACGTGGGCGGCACGCGCCACCAGACGTACCCT
 CGACGCTGCGCACGCTGCCCGGCACGCGCTTGCCTGGCTGGCAGAGCCGACGCCACAGCCACTTCGA
 CTATGACCCGCGTGCCGACGAGTCTTCTTCGACCGCCACCCGGGCGTCTTCGCTCACATCCTGAACTAT
 TACCGCACCGGAAGCTTCACTGCCCGCCGACGTGTGCGGGCCGCTCTACGAGGAGGAGCTGGCCTTCT
 GGGGATCGACGAGACGGACGTGGAGCCCTGCTGCTGGATGACCTATCGCCAGCACCGAGACGCTGAGGA
 GGCGCTGGACAGCTTTGGCGGTGCGCCCTTGGACAACAGCGCCGACGACGCGGACGCCGACGCCCGCC
 GACTCGGGCGACGGCAGGACGAGCTGGAGATGACCAAGAGATTGGCACTCAGTGACTCCCAGATGGCC
 GGCTGGCGGCTTCTGGCGCCGCTGGCAACCGCGCATCTGGGCGCTGTTTCGAGGACCCCTACTCATCCCG
 CTACGCGCGGTATGTGGCCTTTGCTCCCTCTTCTTCATCCTGGTCTCCATCACAACCTTCTGTCTGGAG
 ACTCACGAGCGCTTCAACCCCATCGTGAACAAGACCGAAATCGAGAACGTTGAAACGGCACCCAAAGTGC
 GGTACTACCGGAAGCAGAGACGGAGGCCCTTCTCACCTACATCGAGGGCGTCTGCGTGGTCTGGTTCAC
 CTTTCGAGTTCTCATGCGTGTGCTCTTCTGCCCAACAAGGTGGAATTCATCAAGAACTCCCTCAATATC
 ATTGACTTTGTGGCCATTCTCCCCTTCTACCTGGAGGTGGGCCTAAGCGGCTGTCTCAAAGCCGCCA
 AGGACGTTCTGGGCTTCTGCGCGTCTGCGCTTCTGCGCATCTGCGCATCTTCAAGCTGACCCGCCA
 CTTGCTGGGCTGAGGGTCTGGGCCACACGCTCCGTGCCAGCACCAACGAGTTCCTGCTGCTTATCATC
 TTCTGGCCCTGGGAGTGCTCATCTTGGCACCATGATCTACTACGCCGAGAGGATAGGGGCACAGCCCA
 ATGACCCAGCGCCAGCGAACACACACACTTTAAAAACATCCCATCGGCTTCTGGTGGGCTGTGGTTCAC
 CATGACGACACTGGGCTATGGAGACATGTATCCCGACGCTGGTCTGGAATGCTGGTGGGAGCCTTGTGT
 GCTCTGGCTGGTGTGCTGACCATTGCCATGCCGTGCCTGTCATCGTGAACAATTTGGGATGTAATACT
 CTTTAGCCATGGCTAAGCAGAACTACCAAAGAAAAAAGAAGCATATTCGCGGCCACCACAGCTGGG
 ATCTCCCAATTATTGTAATCTGTCTGTAACCTCTCCACACCACAGTACTCAGAGTGACACATGCCCGCTG
 GCCCAGGAAGAAATTTAGAAATTAACAGAGCAGGTAGGAAACCTCTCAGAGGCATGTGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225883 representing NM_008421
 Red=Cloning site Green=Tags(s)

MGQGDESERIVINVGTRHQTYRSTLRLTPGTRLAWLAEPDAHSHFDYDPRADFFFDHRHPGVFAHILNY
 YRTGKLHCPADVCGPLYEEELAFWGIETDVEPCWMTYRQHRDAEEALDSFGGAPLNSADDADADGPG
 DSGDGEDELEMTKRLALSDPDGRPGGFWRWQPRIWALFEDPYSSRYARYVAFASLFFILVSITTFCLE
 THERFNPIVKNKTEIENVRNGTQVRYREAETEAFPTYIEGVCVWFTEFELMRVVFVCPNKVEFIKNSLNI
 IDFVAILPFYLEVGLSGLSSKAAKDVLFGLRVVRFVRLRIFKLTRHFVGLRVLGHTLRSTNEFLLLI
 FLALGVLIFATMIYYAERIGAQPNPSASEHTEFKNIPIGFWAVVTMTTLGYGDMYPQTWSGMLVGALC
 ALAGVLTAMPVPVIVNFMYYSLAMAKQKLPKPKKHHIPPPQLGSPNYCKSVNSPHHSTQSDTCPL
 AQEEILEINRAGRKPLRGMSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9030_g10.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN: NM_008421

ORF Size: 1533 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

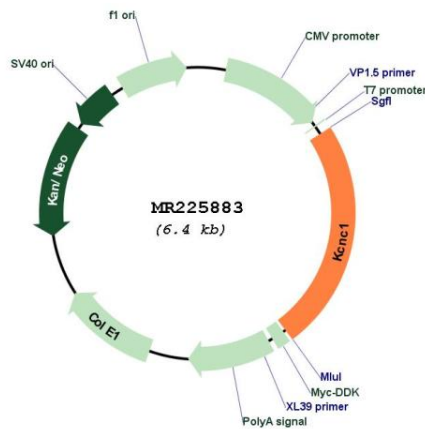
Reconstitution Method:

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_008421.3](#), [NP_032447.1](#)
RefSeq Size: 7788 bp
RefSeq ORF: 1536 bp
Locus ID: 16502
UniProt ID: [P15388](#)
Cytogenetics: 7 30.1 cM
MW: 58.4 kDa

Gene Summary: Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient (PubMed:2599109, PubMed:1400413). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well. Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225883