

Product datasheet for **RC215716**

KCNC1 (NM_004976) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNC1 (NM_004976) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNC1
Synonyms:	EPM7; KV3.1; KV4; NGK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC215716 representing NM_004976
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCCAAGGGGACGAGAGCGAGCGCATCGTGATCAACGTGGGCGGCACGCGCCACCAGACGTACCGCT
 CGACCCTGCGCACGCTGCCCGGCACGCGCTCGCTGGCTGGCGGAGCCGACGCCACAGCCACTTCGA
 CTATGACCCGCGTGTGACGAGTCTTCTTCGACCGCCACCCCGCGTCTTCGCGCACATCCTGAACTAC
 TACCGCACGGCAAGCTGCACTGCCAGCCGACGTGTGCGGGCCGCTCTACGAGGAGGAGCTGGCCTTCT
 GGGGATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACGTACCGCCAGCACCGCGACGCCGAGGA
 GGCTCTGGACAGCTTCGGCGCGCTCCTCTGGACAACAGCGCCGACGACGCGGACGCCGACGCCCTGGC
 GACTCGGGCGACGGGAGGACGAGCTGGAGATGACCAAGCGCTGGCGCTCAGTGACTCCCCGGATGGCC
 GGCTGGCGGCTTTGGCGCCGCTGGCAGCCGCGCATCTGGCGCTCTTCGAGGACCCGACTCGTCCCG
 CTACGCGCGGTATGTGGCCTTCGCTTCCCTCTTTCATCCTGGTCTCCATCACCACCTTCTGCCTGGAG
 ACCCAGAGCGCTTCAACCCCATCGTGAACAAGACGGAGATCGAGAACGTTTCGCAATGGCAGCAAGTGC
 GCTACTACCGGGAGGCCGAGACGGAGGCCCTTCTTACCTACATCGAGGGCGTCTGTGTGGTCTGGTTCAC
 CTTTCGAGTTTCTCATGCGTGTGATCTTCTGCCCAACAAGGTAGAGTTTCAAGAACTCGCTCAACATC
 ATTGACTTTGTGGCCATCCTGCCCTTCTACCTGGAGGTGGGGCTGAGCGGCTGTCTCCAAGGCAGCCA
 AGGACGTGCTGGGCTTCTGCGCGTCTGCGCTTCGTGCGCATCTTGGCATCTTAAAGTGACCCGCCA
 CTTTGTGGGCTGCGGCTCCTGGCCACACGCTCCGAGCCAGCACCAACGAGTTCCTGCTGCTCATCATC
 TTCTGGCCTTGGCGTGTGATCTTCGCCACCATGATCTACTACGCCGAGAGGATAGGGGCACAGCCCA
 ATGACCCAGCCAGTGAACACGACGCACTTTAAGAATCCCCATCGGCTTCTGGTGGGCGTGTGTGAT
 CATGACGACCCCTGGGCTATGGAGACATGTACCCGACAGCGTGGTCCGGCATGCTGGTGGGGCTCTGTGT
 GCGCTGGCGGGCTGCTACCATCGCCATGCCCGTCCCGTCCATCGTGAACAATTCGGGATGTATTACT
 CCTTAGCCATGGCTAAGCAGAACTACCAAGAAAAAAGAAGCATATTCGCGGCCACCCGAGCTGGG
 ATCTCCCAATTATTGTAATCTGTGTAATCTCCACACCACAGTACTCAGAGTGACACATGTCCGCTG
 GCCCAGGAAGAAATTTAGAAATTAACAGAGCAGGTAGGAAACCTCTTAGAGGCATGTGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215716 representing NM_004976
 Red=Cloning site Green=Tags(s)

MGQGDESERIVINVGTRHQTYRSTLRLTPGTRLAWLAEPDAHSHFDYDPRADFFFDHRHPGVFAHILNY
 YRTGKLGHPADVCGPLYEEELAFWIDEIDVPECCWMTYRQHRDAEEALDSFGGAPLNSADDADADGPG
 DSGDGEDELEMTKRLALSDPDGRPGFWRRWQPRIWALFEDPYSSRYARYVAFASLFFILVSIITFCLE
 THERFNPIVKNKTEIENVRNGTQVRYREAETEAFITYIEGVCVWFTEFELMRVIFCPNKVEFIKNSLNI
 IDFVAILPFYLEVGLSGLSSKAAKDVLFGRVRFVRLRIFKLRHFVGLRVLGHTLRASNEFLLLI
 FLALGVLIFATMIYYAERIGAQPNPSASEHTEFKNIPIGFWAVVTMTLGYGDMYPQTWSGMLVGALC
 ALAGVLTAMPVPVIVNFMYYSLAMAKQKLPKPKKHHIPRPPQLGSPNYCKSVNSPHHSTQSDTCPL
 AQEEILEINRAGRKPLRGMSI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1407_d06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN:

NM_004976

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:

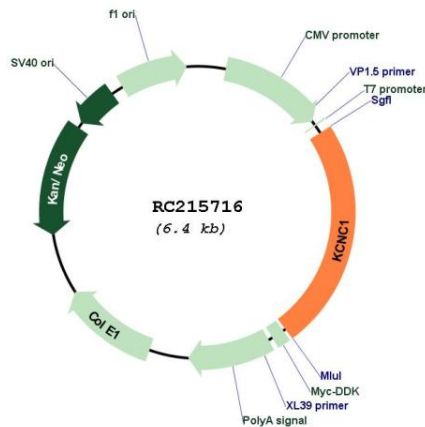
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

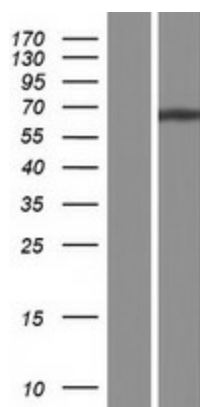
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004976.4
RefSeq Size:	1602 bp
RefSeq ORF:	1536 bp
Locus ID:	3746
UniProt ID:	P48547
Cytogenetics:	11p15.1
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	57.8 kDa
Gene Summary:	This gene encodes a member of a family of integral membrane proteins that mediate the voltage-dependent potassium ion permeability of excitable membranes. Alternative splicing is thought to result in two transcript variants encoding isoforms that differ at their C-termini. These isoforms have had conflicting names in the literature: the longer isoform has been called both "b" and "alpha", while the shorter isoform has been called both "a" and "beta" (PMIDs 1432046, 12091563). [provided by RefSeq, Oct 2014]

Product images:



Circular map for RC215716



Western blot validation of overexpression lysate (Cat# [LY417608]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215716 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).