

Product datasheet for **RG215716**

KCNC1 (NM_004976) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNC1 (NM_004976) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNC1
Synonyms:	EPM7; KV3.1; KV4; NGK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG215716 representing NM_004976
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCCAAGGGGACGAGAGCGAGCGCATCGTGATCAACGTGGGCGGCACGCGCCACCAGACGTACCCT
 CGACCCTGCGCACGCTGCCCGGCACGCGCTCGCTGGCTGGCGGAGCCGACGCCACAGCCACTTCGA
 CTATGACCCGCGTGTGACGAGTCTTCTTCGACCGCCACCCCGCGTCTTCGCGCACATCCTGAACTAC
 TACCGCACGGCAAGCTGCACTGCCAGCCGACGTGTGCGGGCCGCTCTACGAGGAGGAGCTGGCCTTCT
 GGGGACATGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACGTACCGCCAGCACCGCGACGCCGAGGA
 GGCTCTGGACAGCTTCGGCGGCGCTCCTCTGGACAACAGCGCCGACGACGCGGACGCCGACGCCCTGGC
 GACTCGGGCGACGGCGAGGACGAGCTGGAGATGACCAAGCGCCTGGCGCTCAGTGACTCCCCGGATGGCC
 GGCTGGCGGCTTTGGCGCCGCTGGCAGCCGCGCATCTGGCGCTCTTCGAGGACCCGACTCGTCCCG
 CTACGCGCGGTATGTGGCCTTCGCTTCCCTCTTTCATCTGGTCTCCATCACCACCTTCTGCCTGGAG
 ACCCAGAGCGCTTCAACCCCATCGTGAACAAGACGGAGATCGAGAACGTTTCGCAATGGCAGCAAGTGC
 GCTACTACCGGGAGGCCGAGACGGAGGCCCTTCTTACCTACATCGAGGGCGTCTGTGTGGTCTGGTTCAC
 CTTTCGAGTTCTCATGCGTGTGATCTTCTGCCCAACAAGGTAGAGTTTCAAGAACTCGCTCAACATC
 ATTGACTTTGTGGCCATCCTGCCCTTCTACCTGGAGGTGGGGCTGAGCGGCTGTCTCCAAGGCAGCCA
 AGGACGTGCTGGGCTTCTGCGCGTCTGCGCTTCGTGCGCATCTTGGCATCTTAAAGTGACCCGCCA
 CTTTGTGGGCTGCGGCTCCTGGCCACACGCTCCGAGCCAGCACCAACGAGTTCCTGCTGCTCATCATC
 TTCTGGCCTTGGCGTGTGATCTTCGCCACCATGATCTACTACGCCGAGAGGATAGGGGCACAGCCCA
 ATGACCCAGCGCCAGTGAGCACACGCACTTTAAGAATCCCCATCGGCTTCTGGTGGGCGTGGTGCAC
 CATGACGACCCCTGGGCTATGGAGACATGTACCCGACAGCGTGGTCCGGCATGCTGGTGGGGCTCTGTGT
 GCGCTGGCGGGCTGCTACCATCGCCATGCCCGTCCCGTCCATCGTGAACAATTCGGGATGTATTACT
 CCTTAGCCATGGCTAAGCAGAACTACCAAGAAAAAAGAAGCATATTCGCGGCCACCCGAGCTGGG
 ATCTCCCAATTATTGTAATCTGTCGTAAGTCTCCACACCACAGTACTCAGAGTGACACATGTCGCGCT
 GCCCAGGAAGAAATTTAGAAATTAACAGAGCAGGTAGGAAACCTCTTAGAGGCATGTCGATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG215716 representing NM_004976
 Red=Cloning site Green=Tags(s)

MGQGDSEIRIVINVGGRHQTYRSTLRITLPGTRLAWLAEPDAHSHFDYDPRADFFDRHPGVFAHILNY
 YRTGKLHCPADVCGPLYEEELAFWGIDETDVEPCWMTYRQHRDAEEALDSFGGAPLNSADDADADGPG
 DSGDGEDELEMTKRLALSDSPDGRPGFWRRWQPRIWALFEDPYSRYARYVAFASLFFILVSITTFCLE
 THERFNPIVKNKTEIENVRNGTQVRYREAEAEFLTYIEGVCVWFTEFLMRVIFCPNKVEFIKNSLNI
 IDFVAILPFYLEVGLSGLSSKAAKDVLFGLRVVRFVIRILRIFKLRHFVGLRVLGHTLRASNEFLLII
 FLALGVLIFATMIYYAERIGAQPNDPSASEHTHFKNIPIGFWWAVVTMTLGYGDMYPQTWSGMLVGALC
 ALAGVLTIAAMPVPVIVNNFGMYSLAMAKQKLPKPKKPKHIPPQQLGSPNYCKSVVNSPHHSTQSDTCPL
 AQEEILEINRAGRKPLRGMSI

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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.

RefSeq: [NM_004976.4](#)

RefSeq Size: 1602 bp

RefSeq ORF: 1536 bp

Locus ID: 3746

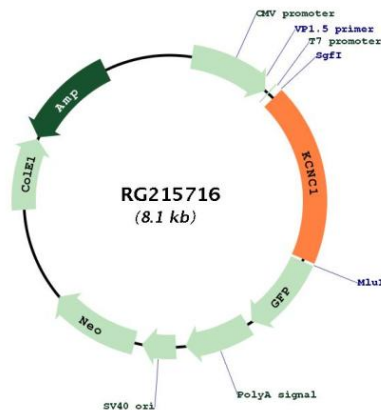
UniProt ID: [P48547](#)

Cytogenetics: 11p15.1

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

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 RG215716