

Product datasheet for **RC209695**

KCNG3 (NM_133329) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNG3 (NM_133329) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNG3
Synonyms:	KV6.3; KV10.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC209695 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCTTCGGGCGCAGCGGGCGCCCTCGGTGGTGTCTGAACGTGGGCGGCGCCCGTATTCGCTGTCCC
 GGGAGCTGCTGAAGGACTTCCCGCTGCGCCGCGTGAGCCGGCTGCACGGCTGCCGCTCCGAGCGCGACGT
 GCTCGAGGTGTGCGACGACTACGACCGCGAGCGCAACGAGTACTTCTTCGACCGGCACTCGGAGGCCTTC
 GGCTTCATCCTGCTCTACGTGCGCGGCCACGGCAAGCTGCGCTTCGCGCCGCGGATGTGCGAGCTCTCT
 TCTACAACGAGATGATCTACTGGGCGCTGGAGGGCGCGCACCTCGAGTACTGCTGCCAGCGCCGCTCGA
 CGACCGCATGTCCGACACCTACACCTTCTACTCGGCCGACGAGCCGGGCGTGTGGGCCGCGACGAGGCG
 CGCCCCGGCGGGCCGAGGCGGCTCCCTCCAGGCGCTGGTGGAGCGCATGCGGCGGACCTTCGAGGAGC
 CCACGTCGTGCTGGCCGCGCAGATCCTGGCTAGCGTGTGCGTGGTGTTCGTGATCGTGTCCATGGTGGT
 GCTGTGCCCGCAGCAGTTGCCCGACTGGCGCAACGCAGCCGCGACAACCGCAGCCTGGATGACCGGAGC
 AGGTACTCCGCCGCCCTGGGAGGGAGCCCTCCGGGATAATTGAAGCTATCTGCATAGGTTGGTTCACTG
 CCGAGTGCATCGTGAGGTTCAATTGTCTCAAAAAACAAGTGTGAGTTTGTCAAGAGACCCCTGAACATCAT
 TGATTTACTGGCAATCACGCCGATTACATCTCTGTGTTGATGACAGTGTTCACAGGCGAGAAGCTCTCAA
 CTCCAGAGGGCTGGAGTCACCTTGAGGGTACTTAGAATGATGAGGATTTTTGGGTGATTAAGCTTGCCC
 GTCACCTCATTGGTCTTCAGACACTCGGTTTACTCTCAAACGTTGCTACCGAGAGATGGTTATGTTACT
 TGTCTTCATTTGTTGCCATGGCAATCTTTAGTGCACCTTCTCAGCTTCTTGAACATGGGCTGGACCTG
 GAAACATCCAACAAGGACTTTACCAGCATTCTGCTGCCTGCTGGTGGGTGATTATCTCTATGACTACAG
 TTGGCTATGGAGATATGTATCCTATCACAGTGCCTGGAAGAATTCTGGAGGAGTTTGTGTTGTCAGTGG
 AATTGTTCTATTGGCATTACCTATCACTTTTATCTACCATAGCTTTGTGCAGTGTATCATGAGCTCAAG
 TTTAGATCTGCTAGGTATAGTAGGAGCCTCTCCACTGAATTCCTGAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209695 protein sequence
 Red=Cloning site Green=Tags(s)

MTFGRSGAASVVLNVGGARYSLSRELLKDFPLRRVSR LHGCRSERDVLEVCCDDYDRERNEYFFDRHSEAF
 GFILLYVRGHGKLRFAPRMCELSFYNEMIIYWGLEGAHLEYCCQRRLLDRMSDITYTFYSADEPGVLRDEA
 RPGGAEAAPSRRLERMRTFEEPTSSLAQILASVSVFVIVSMVVLCASTLPDWRNAAADNRSLLDRS
 RYSAGPGREPSGIIIEAICIGWFTAECIVRFIVSKNKCEFVKRPLNIIDLLAITPYIISVLMVFTGENSQ
 LQRAGVTLRVLMMRIFWVIKLRHF IGLQTLGLTLKRCYREVMMLLVFICVAMAI FSALSQLEHGLDL
 ETSNKDFTSIPAACWWVIISMTTVGYGDMYPITVPRILGGVCVVSIVLLALPITFIYHSFVQCYHELK
 FRSARYSRSLSTEFNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6478_f07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_133329

ORF Size: 1308 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_133329.6](#)

RefSeq Size: 3854 bp

RefSeq ORF: 1311 bp

Locus ID: 170850

UniProt ID: [Q8TAE7](#)

Cytogenetics: 2p21

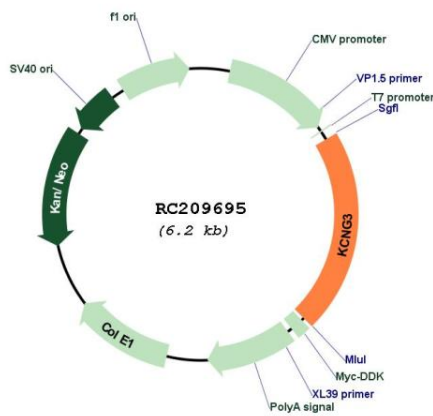
Domains: BTB, K_tetra, ion_trans

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

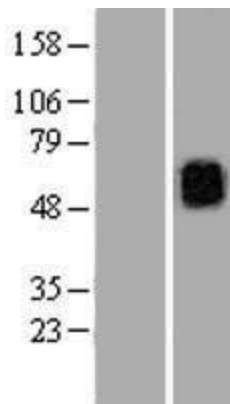
MW: 49.6 kDa

Gene Summary: Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, subfamily G. This member is a gamma subunit functioning as a modulatory molecule. Alternative splicing results in two transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC209695



Western blot validation of overexpression lysate (Cat# [LY406714]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC224875] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).