

Product datasheet for **RG220851**

KCNG4 (NM_172347) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNG4 (NM_172347) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNG4
Synonyms:	KV6.3; KV6.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG220851 representing NM_172347
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCATGCCTCCAGAGACGGGGCCTGCATCCAGACACCACCTATGGTCCACAGCCCTTGGAG
 GTCAGCTCCTGTCCAGCCCATGGAGACGCCGTCATCAAGGGCCTTTACTACCGGAGGGTGCAGGAGGT
 GGGTGCCTGGACGCCTCCCGAGTGGACCTGAAGAAGGAGATCCTGATCAACGTGGGGGGCAGGAGGTAT
 CTCCTCCCTGGAGCACACTGGACCGGTTCCCGCTGAGCCGCTGAGCAAACCTAGGCTCTGTCCGAGCT
 ACGAGGAGATCGTGCAGCTCTGCATGATTACGACGAGGACAGCCAGGAGTTCTTCTCGACAGGAGCCC
 CAGCGCCTTCGGGGTGTCTGTGAGCTTCTGGCGGCCGGAAGCTGGTGTCTGACAGGAGATGTGCGG
 CTGTCTTCCAGGAGGAGCTGGCCTACTGGGCATCGAGGAGGCCACCTGGAGAGGTGTGCTGCGGA
 AGCTGTGAGGAAGCTGGAGGAGCTGGAGGAGCTGGCCAAAGCTGCACAGGGAGGACGTACTGAGGCAGCA
 GAGGGAGACCCCGCCCGCCCTCGCACTCTCGCGCTGGGGCTGTGCATGAACCGGCTGCGCGAGATG
 GTGAAAAACCGCAGTCCGGGCTGCCCGGAAGGTCTTCGCTTGCTCTCCATCCTCTTCGTGGCCACCA
 CAGCCGTGAGCCTGTGTGTCAGCACCATGCCCGACCTCAGGGCAGAGGAGACCAGGGCGAATGCTCTCG
 GAAGTGCTACTATATTTTCATCGTGGAGACCATCTGCGTGGCCTGGTTCTCCCTGGAGTTCTGCCTGCGG
 TTTGTCCAGGCCAAGACAAGTGTCAAGTCTTCCAGGGGCCCTGAACATCATCGACATCCTGGCCATCT
 CCCATACTACGTGTGCTGGCGGTGTCTGAGGAGCCCCGGAGGACGGCAAGAGGCCGAGCGGGAGCTC
 CTACCTGGAGAAGTGGGGCTGGTCTGCGTGTGCTGCGAGCGCTGCGCATCCTCTACGTGATGCGCCTG
 GCTCGCACTCGCTGGGGCTGCAGACGCTGGGGCTCACCGTGCGCCGTTGCACACGTGAGTTCGGCCTGC
 TCCTTCTCTTCCGGCGTGGCCATCACCTCTTCCCTTTGGTCTACGTGGCCGAGAAGGAGTCCGG
 GCGGGTGTGGAGTTCACCAGCATCCCCGCTCCTATTGGTGGCCATCATCTCCATGACAACCGTGGGC
 TACGGGGACATGGTGCCACAGTGTGCCAGGCCAGATGGTGGCCCTCAGCAGCATCTGAGCGGGATCC
 TCATCATGGCCTTCCCGCCACGTCTATCTTCCACACCTTCTCCCACTCTACCTGGAGCTCAAGAAGGA
 GCAGGAGCAGTTCAGGCCCGCTCCGCCACCTCCAAAACACCGGTCCAGCCAGTGAATGTGAACCTCTG
 GACCCCATGTGGCCAGTGAACATGAGCTCATGAACGATGTCAATGACCTAATCTGGAGGGCCAGCCT
 TGCCTATCATGCACATGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG220851 representing NM_172347
 Red=Cloning site Green=Tags(s)

MPMPSRDGGLHPRHHYGHSPWSQLLSSPMETPSIKGLYYRRVRKVGALDASPVDLKKEILINVGRRY
 LLPWSTLDRFPLSRLSKLRLCRSYEEIVQLCDDYDEDSQEFFFDSPSAFGVIVSFLAAGKLVLLQEMCA
 LSFQEELAYWGIEEAHLERCLLRKLEELAKLHREDVLRQRETRRPASHSSRWGLCMNRLREM
 VENPQSGLPKVFACLSILFVATTAVSLCVSTMPDLRAEEDQGECSRKYIFIVETICVAFSLEFCLR
 FVQAQDKCQFFQGPLNIIDILAI SPYYVSLAVSEPPEDGKRPSGSSYLEKVGLVLRVLRALRILYVMRL
 ARHSLGLQTLGLTVRRTREFGLLLLFLAVAITLFSPLVYVAEKESGRVLEFTSIPASYWWAIIISMTTVG
 YGDMVPHSVPGQMVALLSSILSGILIMAFPATSIFFHTFSHSYLELKEQEQLQARLRHLQNTGPASECELL
 DPHVASEHELMNDVNDLILEGPALPIMHM

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_172347

ORF Size: 1558 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_172347.1](#), [NP_758857.1](#)

RefSeq Size: 1681 bp

RefSeq ORF: 1560 bp

Locus ID: 93107

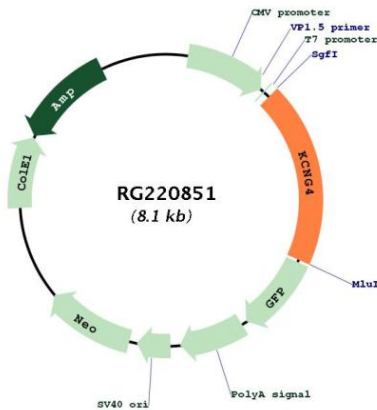
UniProt ID: [Q8TDN1](#)

Cytogenetics: 16q24.1

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

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 functions as a modulatory subunit. The gene has strong expression in brain. Multiple alternatively spliced variants have been found in normal and cancerous tissues. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG220851