

Product datasheet for **RG216146**

KCNG4 (NM_133490) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNG4 (NM_133490) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNG4
Synonyms:	KV6.3; KV6.3, KV6.4, MGC4558, MGC129609; KV6.4; MGC4558; MGC129609; potassium voltage-gated channel, subfamily G, member 4; potassium voltage-gated channel, subfamily G, member 4, isoform 1; voltage-gated potassium channel Kv6.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216146 representing NM_133490 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCATGCCTCCAGAGACGGGGCCTGCATCCAGACACCACCTATGGTCCACAGCCCTTGA
GTCAGCTCCTGTCCAGCCCATGGAGACGCCGTCCATCAAGGGCCTTTACTACCGAGGGTGCGGAAGGT
GGGTGCCCTGGACGCCTCCCAAGTGGACCTGAAGAAGGAGATCCTGATCAACGTGGGGGAGGAGGTAT
CTCCTCCCTGGAGCACACTGGACCGGTTCCCGCTGAGCCGCTGAGCAAACCTCAGGCTCTGTCGGAGCT
ACGAGGAGATCGTGCAGCTCTGCGATGATTACGACGAGGACAGCCAGGAGTTCTTCTTCGACAGGAGCCC
CAGCGCCTTCGGGGTGATCGTGAGCTTCTGGCGGCCGGAAGCTGGTCTTCTGCAGGAGATGTGCGG
CTGTCTTCCAGGAGGAGCTGGCCTACTGGGCATCGAGGAGGCCACCTGGAGAGGTGCTGCCTGCGGA
AGCTGCTGAGGAAGCTGGAGGAGCTGGAGGAGCTGGCCAAGCTGCACAGGGAGGACGTACTGAGGCAGCA
GAGGGAGACCCCGCCCGCCCTCGCACTCTCGCGCTGGGGCTGTGCATGAACCGGCTGCGCGAGATG
GTGAAAACCCGAGTCCGGGCTGCCCGGAAGGTCTTCGCTTGCTCTCCATCCTCTTCGTGGCCACCA
CAGCCGTGAGCCTGTGTGTCAGCACCATGCCCGACCTCAGGGCAGAGGAGGACCAGGTGAGCGGCCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG216146 representing NM_133490
 Red=Cloning site Green=Tags(s)

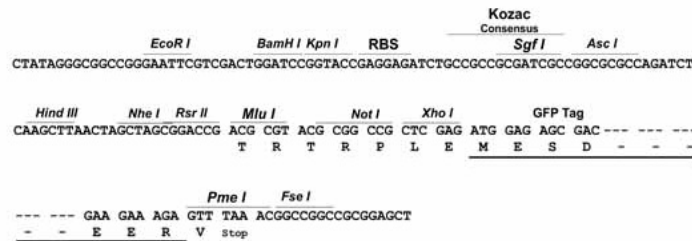
MPMPSRDGGGLHPRHHYGHSPWSQLLSSPMETPSIKGLYRRVRKVGALDASPVDLKEILINVGGRRY
 LLPWSTLDRFPLSRLSKLRLCRSYEEIVQLCDDYDEDSQEFFFDSPSAFGVIVSFLAAGKLVLLQEMCA
 LSFQEELAYWGIIEAHLERCCRLKLLRLEELEELAKLHREDVLRQQRETRRPASHSSRWGLCMNRLREM
 VENPQSGPLPGKVFACLSILFVATTAVSLCVSTMPDLRAEEDQVSGL

TRTRPLE - GFP Tag - V

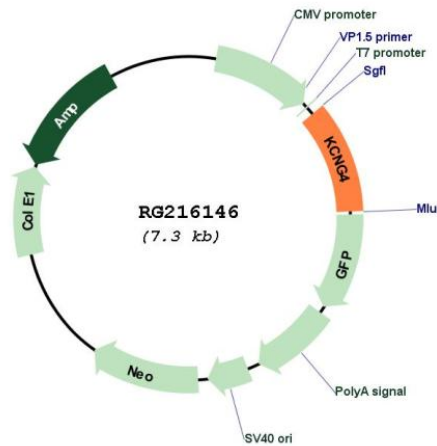
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_133490

ORF Size: 768 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:	<ol style="list-style-type: none">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_133490.2 , NP_597997.1
RefSeq Size:	2233 bp
RefSeq ORF:	770 bp
Locus ID:	93107
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]