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Product datasheet for RG207384

Kv beta 1 (KCNAB1) (NM_172159) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv beta 1 (KCNAB1) (NM_172159) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kv beta 1
Synonyms:	AKR6A3; hKvb3; hKvBeta3; KCNA1B; KV-BETA-1; Kvb1.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG207384 representing NM_172159
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAAGTCTCCATAGCCTGCACAGAGCACAATTTGAAGAGTCGGAATGGTGAGGACCGACTTCTGAGCA
AGCAGAGCTCCACCGCCCCCAATGTGGTAAACGCAGCCCGGGCCAAATTCCGCACGGTCGCTATCATCGC
GCGCAGCCTGGGGACGTTCACGCCTCAGCATCACATTTCTCTCAAAGAGTCCACCGCAAAGCAGACTGGC
ATGAAATATAGGAATCTTGGAAAATCAGGACTCAGAGTTTCTTGCTTGGGTCTTGGAACATGGGTGACAT
TTGGAGGTCAAATTTCAGATGAGGTTGCTGAACGGCTGATGACCATCGCCTATGAAAGTGGTGTTAACCT
CTTTGATACTGCCGAAGTCTATGCTGCTGGAAAGGCTGAAGTGATTCTGGGGAGCATCATCAAGAAGAAA
GGCTGGAGGAGGTCCAGTCTGGTCATAACAACCAAACTCTACTGGGGTGGAAAAGCTGAAACAGAAAGAG
GGCTGTCAAGAAAGCATATTATTGAAGGATTGAAGGGCTCCCTCCAGAGGCTGCAGCTCGAGTATGTGGA
TGTGGTCTTTGCAAATCGACCGGACAGTAACACTCCCATGGAAGAAATTGTCCGAGCCATGACACATGTG
ATAAACCAAGGCATGGCGATGTACTGGGGCACCTCGAGATGGAGTGCTATGGAGATCATGGAAGCCTATT
CTGTAGCAAGACAGTTCAATATGATCCCACCGGTCTGTGAACAAGCTGAGTACCATCTTTTCCAGAGAGA
GAAAGTGGAGGTCCAGCTGCCAGAGCTCTACCACAAAATAGGTGTTGGCGCAATGACATGGTCTCCACTT
GCCTGTGGAATCATCTCAGGAAAATACGGAAACGGGGTGCCTGAAAGTTCCAGGGCTTCACTGAAGTGCT
ACCAGTGGTTGAAAGAAAGAATTGTAAGTGAAGAAGGGAGAAAACAGCAAAACAAGCTAAAAGACCTTTC
CCCAATTGCGGAGCGTCTGGGATGCACACTACCTCAGCTAGCTGTTGCGTGGTGCCTGAGAAACGAAGGT
GTGAGTTCTGTGCTCCTGGGATCATCCACTCCTGAACAACTCATTGAAAACCTTGGTGCCATTCAGGTTC
TCCCAAAGATGACATCACATGTGGTAAATGAGATTGATAACATACTGCGCAACAAGCCCTACAGCAAGAA
GGACTATAGATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

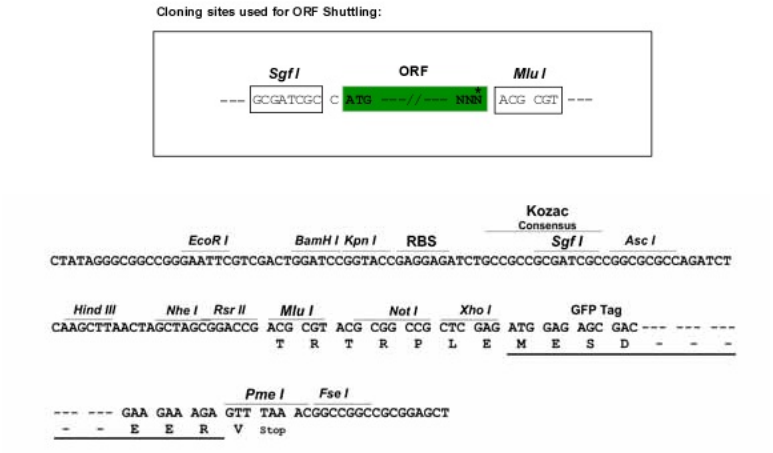
>RG207384 representing NM_172159
Red=Cloning site Green=Tags(s)

MQVSIACTEHNLKSRNGEDRLLSKQSSTAPNVVNAARAKFRTVAIIARSLGTFTPQHHISLKESTAKQTG
MKYRNLGKSGLRVSCLGLGTWVTFGGQISDEVAERLMTIAYESGVNLFDTAEVYAAGKAEVILGSIIKKK
GWRRSSLVITTKLYWGGKAETERGLSRKHIIEGLKGSLQRLQLEYVDVVFANRPDSNTPMEEIVRAMTHV
INQGMAMYWGTSRWSAMEIMEAYSVARQFNMIPPVCEQAEYHLFQREKVEVQLPELYHKIGVGAMTWSPL
ACGIISGKYGNGVPESSRASLKCYQWLKERIVSEEGRKQQNKLKDLSPIAERLGCTLPQLAVAWCLRNEG
VSSVLLGSSTPEQLIENLGAIQVLPKMTSHVVNEIDNILRNKPYSKKDYRS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172159

ORF Size: 1203 bp

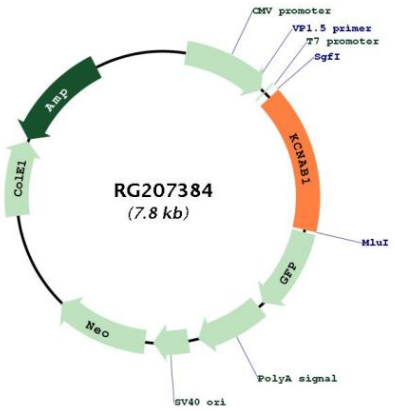
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_172159.2, NP_751891.1
RefSeq Size:	4094 bp
RefSeq ORF:	1206 bp
Locus ID:	7881
UniProt ID:	Q14722
Cytogenetics:	3q25.31
Protein Families:	Druggable Genome, Ion Channels: Other
Gene Summary:	Potassium 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. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member includes distinct isoforms which are encoded by alternatively spliced transcript variants of this gene. Some of these isoforms are beta subunits, which form heteromultimeric complexes with alpha subunits and modulate the activity of the pore-forming alpha subunits. [provided by RefSeq, Apr 2015]

Product images:



Circular map for RG207384