

Product datasheet for **RG234492**

Kv3.2 (KCNC2) (NM_001260499) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv3.2 (KCNC2) (NM_001260499) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kv3.2
Synonyms:	KV3.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234492 representing NM_001260499
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGCA
 GCACCCTCAAGACCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCGAGCCCCAGGGCAGTCTT
 GACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCTCCACTGTCGCGCGCCGAGAGCGCCCCGCTG
 TCCCCGGGCCAGGGCGCTGCTTCGAGGGCGCGCGGCAACTGCAGTCCCGCGCGGCAGGGCCAGCG
 ACCATCCCGGTGGCGCCGCGAGTCTTCTTCGACCGGCACCCGGGCGTCTTCGCTATGTGCTCAATTA
 CTACCGCACCGGCAAGCTGCACTGCCCCGAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTGGCTTC
 TGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGG
 AGGCGCTGGACATCTTCGAGACCCCGACCTATTGGCGGCGACCCGGCGACGACGAGGACCTGGCGGC
 CAAGAGGCTGGGCATCGAGGACGCGCGGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGCTGGAGGAGG
 CTGCAGCCCCGCATGTGGGCCCTCTTGAAGACCCTACTCGTCCAGAGCCGCCAGGTTTATTGCTTTTG
 CTCTTTATTCTTCATCCTGGTTTCAATTACAACTTTTTGCCTGGAAACACATGAAGCTTCAATATTGT
 TAAAAACAAGACAGAACCAGTCAATGGCACAAAGTGTGTTCTACAGTATGAAATTGAAACGGATCCT
 GCCTTGACGTATGTAGAAGGAGTGTGTGGTGTGGTTACTTTTGAATTTTAGTCCGTATTGTTTTT
 CACCCAATAAACTTGAATTCATCAAAAATCTCTTGAATATCATTGACTTTGTGGCCATCCTACCTTTCTA
 CTTAGAGGTGGGACTCAGTGGGCTGTATCAAAGCTGCTAAAGATGTGCTTGGCTTCTCAGGGTGGTA
 AGGTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGGCTGAGGGTGTGGACATA
 CTCTTCGAGCTAGTACTAATGAATTTTGTCTGATAATTTTCTGGCTTAGGAGTTTGATATTTGC
 TACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTCAGTACTGAGCACACACAG
 TTCAAAAACATCCCATTTGGTTCTGGTGGGCTGTAGTGACCATGACTACCCTGGTTATGGGGATATGT
 ACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTGGCTGGAGTGTGACAATAGCCAT
 GCCAGTGCCTGTATTGTCAATAATTTTGAATGTACTACTCCTTGGCAATGGCAAAGCAGAAAATTCCA
 AGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCTACTTTTGAAGACAGAATTA
 ATATGGCCTGCAATAGTACACAGAGTACACATGTCTGGGCAAAGACAATCGACTTCTGGAACATAACAG
 ATCAGGATATGAAAATCCGAAGCTTAAACAACATAGCGGGCTTGGCAGGCAATGCTCTGAGGCTCTCT
 CCAGTAACATCACCTACAACCTCCTTGTCTCTGAGGGCTCTCGATCTCCATCCCATCTATCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG234492 representing NM_001260499
 Red=Cloning site Green=Tags(s)

MGKIENNERVILNVGGTRHETYRSTLKTLPGTRLALLASSEPPGDCLTTAGDKLQSPPPPLSPPPRAPPL
 SPGPGGCFEGGAGNCSSRGRASDHPGGGREFFDRHPGVFAYVLNYYRTGKLHCPADVCGPLFEEELAF
 WGIDETDVEPCCWMTYRQHRDAEEALDIFETPDLIGGDPGDEDLAAKRLGIEDAAGLGGPDGKSGRWRR
 LQPRMWALFEDPYSSRAARFIAFASLFFILVSIITFCLETHEAFNIVKNKTEPVINGTSVVLQYEIETDP
 ALTYVEGVVWFTEFLVRIVFSPNKLEFIKNLLNIIDFVAILPFYLEVGLSGLSSKAADVLGFLRVV
 RFVRILRIFKLTRHFVGLRVLGHTLRASNEFLLLIIFLALGVLIFATMIYYAERVGAQPNDPSASEHTQ
 FKNIPIGFVAVVTMTTLGYGDMYPQTSWMLVGALCALAGVLT IAMPVPVIVNNFGMYYSLAMAKQKLP
 RKRKKHIPPAPQASSPTFCKTELNMACNSTQSDTCLGKDNRLLEHNRSGYEKSRSLNNIAGLAGNALRLS
 PVTSPYNSPCPLRRSRSPISIL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001260499

ORF Size: 1749 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_001260499.2](#)

RefSeq Size: 5347 bp

RefSeq ORF: 1752 bp

Locus ID: 3747

UniProt ID: [Q96PR1](#)

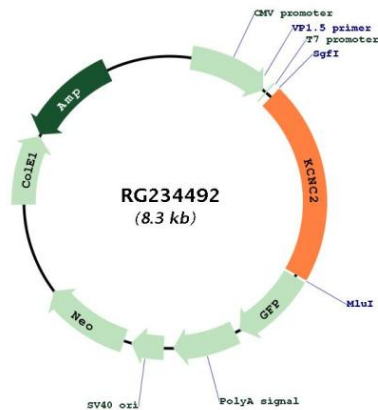
Cytogenetics: 12q21.1

Protein Families:

Druggable Genome, Ion Channels: Potassium, Transmembrane

Gene Summary:

The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to one of these subfamilies, namely the Shaw subfamily. The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

Product images:

Circular map for RG234492