

Product datasheet for **RC222290**

Kv3.2 (KCNC2) (NM_139137) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv3.2 (KCNC2) (NM_139137) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kv3.2
Synonyms:	KV3.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC222290 representing NM_139137
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGCA
 GCACCCTCAAGACCCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCGAGCCCCAGGCGACTGCTT
 GACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCCCTCCACTGTCGCGCGCCGCGAGAGCGCCCCGCTG
 TCCCCGGGCCAGGCGGCTGCTTCGAGGGCGCGCGGCAACTGCAGTCCCGCGGGCGAGGGCCAGCG
 ACCATCCCGGTGGCGGCCGAGTTCCTTTCGACCGGCACCCGGGCGTCTTCGCCTATGTGCTCAATTA
 CTACCGCACCGGCAAGCTGCACTGCCCCGAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTGGCCTTC
 TGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGG
 AGGCGCTGGACATCTTCGAGACCCCGACCTATTGGCGGGACCCGGGCGACGACGAGGACCTGGCGGC
 CAAGAGGCTGGGCATCGAGGACGCGGGCGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGCTGGAGGAGG
 CTGACGCCCGCATGTGGGCCCTCTTCGAAGACCCTACTCGTCCAGAGCCGCCAGGTTTATTGCTTTTG
 CTCTTTATTCTTCATCCTGGTTTCAATTACAACTTTTTGCCTGGAAACACATGAAGCTTCAATATTGT
 TAAAAACAAGACAGAACCAGTCAATGGCACAAAGTGTGTTCTACAGTATGAAATTGAAACGGATCCT
 GCCTTGACGTATGTAGAAGGAGTGTGTGGTGTGGTTACTTTTGAATTTTGTAGTCCGTATTGTTTTT
 CACCCAATAAACTTGAATTCATCAAAAATCTCTTGAATATCATTGACTTTGTGGCCATCCTACCTTTCTA
 CTTAGAGGTGGGACTCAGTGGGCTGTATCCAAAGCTGCTAAAGATGTGCTTGGCTTCTCAGGGTGGTA
 AGGTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGGTCTGAGGGTGGTGGACATA
 CTCTTCGAGCTAGTACTAATGAATTTTGGCTGCTGATAATTTTCTGGCTTAGGAGTTTTGATATTTGC
 TACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTCAGTACTGAGCACACACAG
 TTCAAAAACATTCCTCATTGGGTTCTGGTGGGCTGTAGTGACCATGACTACCCTGGGTTATGGGGATATG
 ACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTCTGGCTGGAGTGTGACAATAGCCAT
 GCCAGTGCCTGTCATTGTCAATAATTTTGAATGTACTACTCCTTGGCAATGGCAAAGCAGAAACTTCCA
 AGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCTACTTTTTGCAAGACAGAATTAA
 ATATGGCCTGCAATAGTACACAGAGTGACACATGTCTGGGCAAAGACAATCGACTTCTGGAACATAACAG
 ATCAGTGTATCAGGTGACGACAGTACAGGAAGTGAAGCCGCACTATCACCCCGAGAAAGGCTCCCCATC
 AGACGCTCTAGTACCAGAGACAAAAACAGAAGAGGGGAAACATGTTTCTACTGACGACAGGTGATTACA
 CGTGTGCTTCTGATGGAGGGATCAGGAAAGGATATGAAAAATCCCGAAGCTTAAACAACATAGCGGGCTT
 GGCAGGCAATGCTCTGAGGCTCTCTCCAGTAACATCACCTACAACCTCTCCTTGTCTCTGAGGGCTCT
 CGATCTCCCATCCCATCTATCTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222290 representing NM_139137
 Red=Cloning site Green=Tags(s)

MGKIENNERVILNVGGTRHETYRSTLKTLPGTRLALLASSEPPGDCLTTAGDKLQSPPPPLSPPPRAPPL
 SPGPGGCFEGGAGNCSSRGRASDHPGGGREFFDHRPGVFAYVLNYYRTGKLHCPADVCGPLFEELAF
 WGIDETDVEPCWMTYRQHRDAEEALDIFETPDLIGGDPGDEDLAAKRLGIEDAAGLGGPDGKSGRWRR
 LQPRMWALFEDPYSSRAARFIAFASLFFILVSITTFCLETHEAFNIVKKNKTEPVIINGTSVVLQYEIETDP
 ALTYVEGVCVWFTEFLVRIVFSFNKLEFIKLLNLIIDFVAILPFYLEVGLSGLSSKAADVLGFLRVV
 RFVIRILRIFKLTRHFVGLRVLGHTLRASNEFLLLIIFLALGVLIFATMIYYAERVGAQPNPDSASEHTQ
 FKNIPIGFWAVVTMTTLGYGDMYPQTSWGMVLGALCALAGVLTAMPVPVIVNNGMYSLAMAKQKLP
 RKRKKHIPPAPQASSPTFCCKTELNMACNSTQSDTCLGKDNRLLEHNRVLSGDDSTGSEPLSPPERLPI
 RRSSTRDKNRGETCFLTTGDYTCASDGGIRKGYEKSRLNLIAGLAGNALRLSPVTSPLYNSPCPLRRS
 RSPIPSIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_139137

ORF Size: 1914 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_139137.4](#)

RefSeq Size: 5512 bp

RefSeq ORF: 1917 bp

Locus ID: 3747

UniProt ID: [Q96PR1](#)

Cytogenetics: 12q21.1

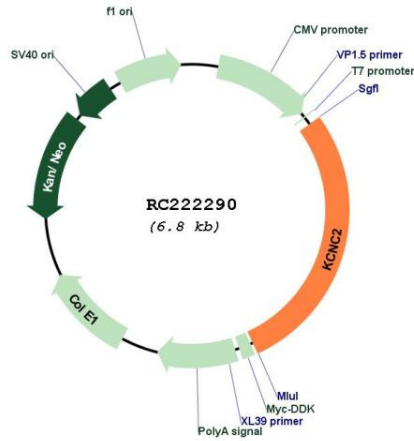
Domains: BTB, K_tetra, ion_trans

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

MW: 70.2 kDa

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 RC222290