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Product datasheet for SC309605

Kv3.2 (KCNC2) (NM_139136) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv3.2 (KCNC2) (NM_139136) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNC2
Synonyms:	KV3.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC309605 representing NM_139136.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGC
AGCACCCTCAAGACCCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCCGAGCCCCCAGGCGACTGC
TTGACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCCTCCACTGTCGCCGCCGCCGAGAGCGCCCCCG
CTGTCCCCCGGGCCAGGCGGCTGCTTCGAGGGCGGCGCGGGCAACTGCAGTTCCCGCGGCGGCAGGGCC
AGCGACCATCCCGGTGGCGGCCGCGAGTTCTTCTTCGACCGGCACCCGGGCGTCTTCGCCTATGTGCTC
AATTACTACCGCACCGGCAAGCTGCACTGCCCCGCAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTG
GCCTTCTGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGAC
GCCGAGGAGGCGCTGGACATCTTCGAGACCCCCGACCTCATTGGCGGCGACCCCGGCGACGACGAGGAC
CTGGCGGCCAAGAGGCTGGGCATCGAGGACGCGGCGGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGC
TGGAGGAGGCTGCAGCCCCGCATGTGGGCCCTCTTCGAAGACCCCTACTCGTCCAGAGCCGCCAGGTTT
ATTGCTTTTGCTTCTTTATTCTTCATCCTGGTTTCAATTACAACTTTTTGCCTGGAAACACATGAAGCT
TTCAATATTGTTAAAAACAAGACAGAACCAGTCATCAATGGCACAAGTGTTGTTCTACAGTATGAAATT
GAAACGGATCCTGCCTTGACGTATGTAGAAGGAGTGTGTGTGGTGTGGTTTACTTTTGAATTTTTAGTC
CGTATTGTTTTTTCACCCAATAAACTTGAATTCATCAAAAATCTCTTGAATATCATTGACTTTGTGGCC
ATCCTACCTTTCTACTTAGAGGTGGGACTCAGTGGGCTGTCATCCAAAGCTGCTAAAGATGTGCTTGGC
TTCCTCAGGGTGGTAAGGTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGGTCTG
AGGGTGCTTGGACATACTCTTCGAGCTAGTACTAATGAATTTTTGCTGCTGATAATTTTCCTGGCTCTA
GGAGTTTTGATATTTGCTACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTTCA
GCTAGTGAGCACACACAGTTCAAAAACATTCCCATTGGGTTCTGGTGGGCTGTAGTGACCATGACTACC
CTGGGTTATGGGGATATGTACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTCTGGCT
GGAGTGCTGACAATAGCCATGCCAGTGCCTGTCATTGTCAATAATTTTGGAATGTACTACTCCTTGGCA
ATGGCAAAGCAGAAACTTCCAAGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCT
ACTTTTTGCAAGACAGAATTAAATATGGCCTGCAATAGTACACAGAGTGACACATGTCTGGGCAAAGAC
AATCGACTTCTGGAACATAACAGATCAGTGTTATCAGGTGACGACAGTACAGGAAGTGAGCCGCCACTA
TCACCCCCAGAAAGGCTCCCCATCAGACGCTCTAGTACCAGAGACAAAAACAGAAGAGGGGAAACATGT
TTCCTACTGACGACAGGTGATTACACGTGTGCTTCTGATGGAGGGATCAGGAAAGATAACTGCAAAGAG
GTTGTCATTACTGGTTACACGCAAGCCGAGGCCAGATCTCTTACTTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:

ACCN: NM_139136

Insert Size: 1842 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_139136.3
RefSeq Size:	3572 bp
RefSeq ORF:	1842 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:	67.6 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]
Transcript Variant: This variant (1) differs in the 3' UTR and coding sequence compared to variant 2. The resulting isoform (KV3.2a) has a shorter and distinct C-terminus compared to isoform KV3.2b.