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Product datasheet for RC210777

Kv3.2 (KCNC2) (NM_153748) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv3.2 (KCNC2) (NM_153748) 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)

ORF Nucleotide Sequence:

>RC210777 representing NM_153748
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGCA
GCACCCTCAAGACCCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCCGAGCCCCCAGGCGACTGCTT
GACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCCTCCACTGTCGCCGCCGCCGAGAGCGCCCCCGCTG
TCCCCCGGGCCAGGCGGCTGCTTCGAGGGCGGCGCGGGCAACTGCAGTTCCCGCGGCGGCAGGGCCAGCG
ACCATCCCGGTGGCGGCCGCGAGTTCTTCTTCGACCGGCACCCGGGCGTCTTCGCCTATGTGCTCAATTA
CTACCGCACCGGCAAGCTGCACTGCCCCGCAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTGGCCTTC
TGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGG
AGGCGCTGGACATCTTCGAGACCCCCGACCTCATTGGCGGCGACCCCGGCGACGACGAGGACCTGGCGGC
CAAGAGGCTGGGCATCGAGGACGCGGCGGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGCTGGAGGAGG
CTGCAGCCCCGCATGTGGGCCCTCTTCGAAGACCCCTACTCGTCCAGAGCCGCCAGGTTTATTGCTTTTG
CTTCTTTATTCTTCATCCTGGTTTCAATTACAACTTTTTGCCTGGAAACACATGAAGCTTTCAATATTGT
TAAAAACAAGACAGAACCAGTCATCAATGGCACAAGTGTTGTTCTACAGTATGAAATTGAAACGGATCCT
GCCTTGACGTATGTAGAAGGAGTGTGTGTGGTGTGGTTTACTTTTGAATTTTTAGTCCGTATTGTTTTTT
CACCCAATAAACTTGAATTCATCAAAAATCTCTTGAATATCATTGACTTTGTGGCCATCCTACCTTTCTA
CTTAGAGGTGGGACTCAGTGGGCTGTCATCCAAAGCTGCTAAAGATGTGCTTGGCTTCCTCAGGGTGGTA
AGGTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGGTCTGAGGGTGCTTGGACATA
CTCTTCGAGCTAGTACTAATGAATTTTTGCTGCTGATAATTTTCCTGGCTCTAGGAGTTTTGATATTTGC
TACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTTCAGCTAGTGAGCACACACAG
TTCAAAAACATTCCCATTGGGTTCTGGTGGGCTGTAGTGACCATGACTACCCTGGGTTATGGGGATATGT
ACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTCTGGCTGGAGTGCTGACAATAGCCAT
GCCAGTGCCTGTCATTGTCAATAATTTTGGAATGTACTACTCCTTGGCAATGGCAAAGCAGAAACTTCCA
AGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCTACTTTTTGCAAGACAGAATTAA
ATATGGCCTGCAATAGTACACAGAGTGACACATGTCTGGGCAAAGACAATCGACTTCTGGAACATAACAG
ATCAGATAACTGCAAAGAGGTTGTCATTACTGGTTACACGCAAGCCGAGGCCAGATCTCTTACT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210777 representing NM_153748
Red=Cloning site Green=Tags(s)

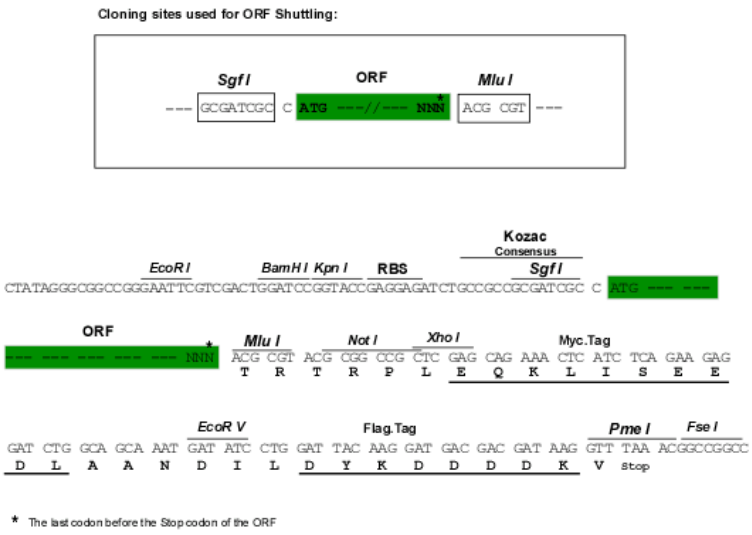
MGKIENNERVILNVGGTRHETYRSTLKTLPGTRLALLASSEPPGDCLTTAGDKLQPSPPPLSPPPRAPPL
SPGPGGCFEGGAGNCSSRGGRASDHPGGGREFFFDRHPGVFAYVLNYYRTGKLHCPADVCGPLFEEELAF
WGIDETDVEPCCWMTYRQHRDAEEALDIFETPDLIGGDPGDDEDLAAKRLGIEDAAGLGGPDGKSGRWRR
LQPRMWALFEDPYSSRAARFIAFASLFFILVSITTFCLETHEAFNIVKNKTEPVINGTSVVLQYEIETDP
ALTYVEGVCVVWFTFEFLVRIVFSPNKLEFIKNLLNIIDFVAILPFYLEVGLSGLSSKAAKDVLGFLRVV
RFVRILRIFKLTRHFVGLRVLGHTLRASTNEFLLLIIFLALGVLIFATMIYYAERVGAQPNDPSASEHTQ
FKNIPIGFWWAVVTMTTLGYGDMYPQTWSGMLVGALCALAGVLTIAMPVPVIVNNFGMYYSLAMAKQKLP
RKRKKHIPPAPQASSPTFCKTELNMACNSTQSDTCLGKDNRLLEHNRSDNCKEVVITGYTQAEARSLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3149_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153748

ORF Size: 1674 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_153748.3

RefSeq Size: 3345 bp

RefSeq ORF: 1677 bp

Locus ID: 3747

UniProt ID: Q96PR1

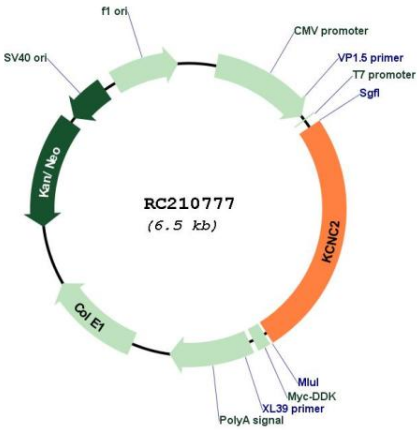
Cytogenetics: 12q21.1

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

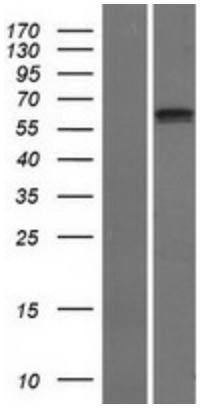
MW: 61.5 kDa

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 RC210777



Western blot validation of overexpression lysate (Cat# [LY406945]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210777 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).