

## 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)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC210777 representing NM\_153748  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGCA  
 GCACCCTCAAGACCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCGAGCCCCAGGCGACTGCTT  
 GACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCTCCACTGTCGCCGCGCCGAGAGCGCCCCGCTG  
 TCCCCGGGCCAGGCGGCTGCTTCGAGGGCGCGCGGCAACTGCAGTCCCGCGCGGCAGGGCCAGCG  
 ACCATCCCGGTGGCGGCCGAGTCTTCTTCGACCGGCACCCGGGCGTCTTCGCTATGTGCTCAATTA  
 CTACCGCACCGGCAAGCTGCACTGCCCCGAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTGGCCTTC  
 TGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGG  
 AGGCGCTGGACATCTTCGAGACCCCGACCTATTGGCGGCGACCCGGCGACGACGAGGACCTGGCGGC  
 CAAGAGGCTGGGCATCGAGGACGCGCGGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGCTGGAGGAGG  
 CTGCAGCCCCGCATGTGGGCCCTCTCGAAGACCCTACTCGTCCAGAGCCGCCAGGTTTATTGCTTTTG  
 CTCTTTATTCTTCATCCTGGTTTCAATTACAACTTTTTGCTGGAAACACATGAAGCTTCAATATTGT  
 TAAAAACAAGACAGAACCAGTCAATGGCACAAGTGTGTTCTACAGTATGAAATTGAAACGGATCCT  
 GCCTTGACGTATGTAGAAGGAGTGTGTGGTGTGGTTACTTTTGAATTTTAGTCCGTATTGTTTTT  
 CACCCAATAAACTTGAATTCATCAAAAATCTCTGAATATCATTGACTTTGTGGCCATCCTACCTTTCTA  
 CTTAGAGGTGGGACTCAGTGGGCTGTATCAAAGCTGCTAAAGATGTGCTTGGCTTCTCAGGGTGGTA  
 AGGTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGGCTGAGGGTGGTGGACATA  
 CTCTTCGAGCTAGTACTAATGAATTTTGTCTGATAATTTTCTGGCTTAGGAGTTTTGATATTTGTC  
 TACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTCAGTACTGAGCACACACAG  
 TTCAAAAACATTCCTCATTGGTTCTGGTGGGCTGTAGTGACCATGACTACCCTGGTTATGGGGATATGT  
 ACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTGGCTGGAGTGTGACAATAGCCAT  
 GCCAGTGCCTGCTATTGTCAATAATTTTGAATGTACTACTCCTTGGCAATGGCAAAGCAGAAAATTCCA  
 AGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCTACTTTTGAAGACAGAATTA  
 ATATGGCCTGCAATAGTACACAGAGTACACATGTCTGGGCAAAGACAATCGACTTCTGGAACATAACAG  
 ATCAGATAACTGCAAAGAGGTTGCTACTACTGGTTACACGCAAGCCGAGGCCAGATCTCTTACT

**ACGCGT**ACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210777 representing NM\_153748  
 Red=Cloning site Green=Tags(s)

MGKIENNERVILNVGGTRHETYRSTLKLTPGTRLALLASSEPPGDCLTTAGDKLQSPPPPLSPPPRAPPL  
 SPGPGGCFEGGAGNCSSRGRASDHPGGGREFFDRHPGVFAYVLNYYRTGKLHCPADVCGPLFEEELAF  
 WGIDETDVEPCCWMTYRQHRDAEEALDIFETPDLIGGDPGDEDLAAKRLGIEDAAGLGGPDGKSGRWRR  
 LQPRMWALFEDPYSSRAARFIAFASLFFILVSITTFCLETHEAFNIVKNKTEPVINGTSVVLQYEIETDP  
 ALTYVEGVCVVWFTFEFLVRIVFSPNKLEFIKNLLNIIDFVAILPFYLEVGLSGLSSKAAKDVLFGLRVV  
 RFVRIIRIFKLTRHFVGLRVLGHTLRASNEFLLLIIFLALGVLIFATMIYYAERVGAQPNDPSASEHTQ  
 FKNIPIGFVWAVVTMTTLGYGDMYPQTSWGMVLGALCALAGVLT IAMPVPVIVNNFGMYYSLAMAKQLP  
 RKRKKHIPPAPQASSPTFCKTELNMACNSTQSDTCLGKDNRLLEHNRSDNCKEVITGYTQAEARSLT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg3149\\_a01.zip](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.

**RefSeq:** [NM\\_153748.3](#)

**RefSeq Size:** 3345 bp

**RefSeq ORF:** 1677 bp

**Locus ID:** 3747

**UniProt ID:** [Q96PR1](#)

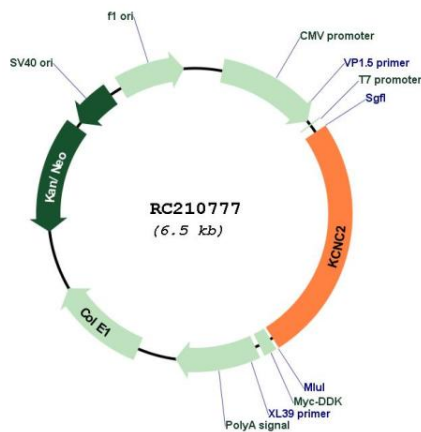
**Cytogenetics:** 12q21.1

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

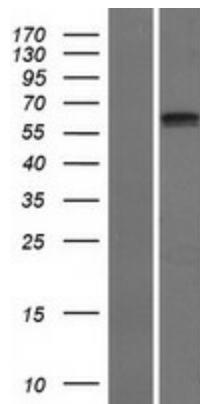
**MW:** 61.5 kDa

**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 untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210777 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).