

Product datasheet for **RG210777**

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: | TurboGFP |
| Symbol: | KCNC2 |
| 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:

>RG210777 representing NM_153748
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGCAAGATCGAGAACAACGAGAGGGTGATCCTCAATGTCGGGGGCACCCGGCACGAAACCTACCGCA
 GCACCCTCAAGACCTGCCTGGAACACGCCTGGCCCTTCTTGCCTCCTCGAGCCCCAGGGGACTGCTT
 GACCACGGCGGGCGACAAGCTGCAGCCGTCGCCGCCCTCCACTGTCGCCGCCGCCGAGAGCGCCCCGCTG
 TCCCCGGGCCAGGGCGCTGCTTCGAGGGCGCGCGGCAACTGCAGTCCCGCGCGGCAGGGCCAGCG
 ACCATCCCGTGGCGCCGCGAGTCTTCTTCGACCGGCACCCGGGCGTCTTCGCTATGTGCTCAATTA
 CTACCGCACCGGCAAGCTGCACTGCCCCGAGACGTGTGCGGGCCGCTCTTCGAGGAGGAGCTGGCTTC
 TGGGGCATCGACGAGACCGACGTGGAGCCCTGCTGCTGGATGACCTACCGGCAGCACCGCGACGCCGAGG
 AGGCGCTGGACATCTTCGAGACCCCGACCTATTGGCGGCACCCGGCGACGACGAGGACCTGGCGGC
 CAAGAGGCTGGGCATCGAGGACGCGCGGGGCTCGGGGGCCCCGACGGCAAATCTGGCCGCTGGAGGAGG
 CTGCAGCCCCGCATGTGGGCCCTCTCGAAGACCCTACTCGTCCAGAGCCGCCAGGTTTATTGCTTTTG
 CTCTTTATTCTTCATCCTGGTTTCAATTAACAATTTTTGCCTGGAAACACATGAAGCTTCAATATTGT
 TAAAAACAAGACAGAACCAGTCAATGGCACAAAGTGTGTTCTACAGTATGAAATTGAAACGGATCCT
 GCCTTGACGTATGTAGAAGGAGTGTGTGGTGTGGTTACTTTTGAATTTTAGTCCGTATTGTTTTT
 CACCCAATAAACTTGAATTCATCAAAAATCTCTTGAATATCATTGACTTTGTGGCCATCCTACCTTTCTA
 CTTAGAGTGGGACTCAGTGGGCTGTATCAAAGCTGCTAAAGATGTGCTTGGCTTCTCAGGGTGGTA
 AGTTTTGTGAGGATCCTGAGAATTTTCAAGCTCACCCGCCATTTTGTAGTCTGAGGGTGGTGGACATA
 CTCTTCGAGCTAGTACTAATGAATTTTTGCTGCTGATAATTTTCCGCTAGGAGTTTGTATTTTGC
 TACCATGATCTACTATGCCGAGAGAGTGGGAGCTCAACCTAACGACCCTCAGCTAGTGAGCACACACAG
 TTCAAAAACATCCCATTTGGTTCTGGTGGGCTGTAGTGACCATGACTACCCTGGTTATGGGGATATGT
 ACCCCCAAACATGGTCAGGCATGCTGGTGGGAGCCCTGTGTGCTCGGCTGGAGTGTGACAATAGCCAT
 GCCAGTGCCTGCTATTGTCAATAATTTTGAATGTACTACTCCTTGGCAATGGCAAAGCAGAAAATTCCA
 AGGAAAAGAAAGAAGCACATCCCTCCTGCTCCTCAGGCAAGCTCACCTACTTTTTGCAAGACAGAATTA
 ATATGGCTGCAATAGTACACAGAGTGACACATGTCTGGGCAAAGACAATCGACTTCTGGAACATAACAG
 ATCAGATAACTGCAAAGAGGTTGCTACTACTGGTTACACGCAAGCCGAGGCCAGATCTCTTACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG210777 representing NM_153748
 Red=Cloning site Green=Tags(s)

MGKIENNERVILNVGGTRHETYRSTLKTLPGTRLALLASSEPPGDCLTTAGDKLQSPPPPLSPPRAPPL
 SPGPGGCFEGGAGNCSSRGGRASDHPGGREFFDRHPGVFAYVLNYYRTGKLHCPADVCGPLFEEELAF
 WGIETDVEPCCWMTYRQHRDAEEALDIFETPDLIIGDPPGDEDLAAKRLGIEDAAGLGGPDGKSGRWRR
 LQPRMWALFEDPYSSRAARFIAFASLFFILVSITTFCLETHEAFNIVKNKTEPVINGTSVVLQYEIETDP
 ALTYVEGVVWFTEFLVRIVFSNPKLEFIKNLLNIIDFVAILPFYLEVGLSGLSSKAAKDVLFGLRVV
 RFVRIILRIFKLTRHFVGLRVLGHTLRASNEFLLLIIFLALGVLIFATMIYYAERVGAQPNPDSASEHTQ
 FKNIPIGFWAVVTMTTLGYDMYPQTSWMLVGALCALAGVLTAMPVPIVNNFGMYSSLAMAKQKLP
 RKRKKHIPPAPQASSPTFCKTELNMACNSTQSDTCLGKDNRLLEHNRSDNCKEVVITGYTQAEARSLT

TRTRPLE - GFP Tag - V

Restriction Sites:

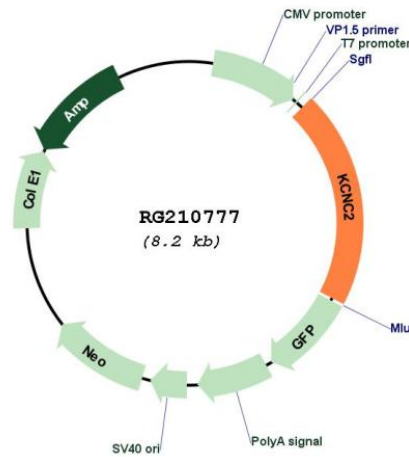
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



| | |
|-------------------------------|---|
| 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: | <ol style="list-style-type: none">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 |
| 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] |