

Product datasheet for **MC222541**

Kcnb2 (NM_001098528) Mouse Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Kcnb2 (NM_001098528) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Kcnb2 |
| Synonyms: | 9630047L19Rik; BB130875; Kv2.2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

Fully Sequenced ORF: >MC222541 representing NM_001098528
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGAAAAGGCACCACCTGGCTTGAACAGAAAGACATCCAGGTCAACACTTTCTCTCTCCAGAAC
 CTGTGGACATTATCCGAAGCAAAACATGCTCTCGGAGAGTTAAGATCAAGTAGGGGCCTTAACCACGA
 AGTCTGTGGAGAACTCTGGACAGGCTTCCCGGACACGCCTGGGGAAGCTCCGCGACTGTAACACTCAC
 GAGAGTCTCTGGAGGTGTGCGATGACTACAACCTTAACGAGAATGAGTATTTCTTCGACCGACATCCTG
 GAGCCTTTACATCTATTCTAAACTTCTACCGGACGGGGAAGCTCCACATGATGGAGGAAATGTGTGCGCT
 CTCTTTTGGCCAAGAGCTGGATTATTGGGGCATCGATGAGATCTACCTAGAGTCTGTGCCAAGCCAGA
 TACCATCAGAAGAAGAGCAGATGAACGAAGAAGTGGAGGGGAGGCGGAGACCATGCGTGAGCGTGAGG
 GTGAGGAGTTTGATAACACCTGTGCCCGGAGAAACGGAAGAACTTTGGGACTTGTGGAGAAACCTAA
 CTCGTCCGTGGCTGCAAAGATCCTGGCCATCGTGTCTATCCTGTTTCATCGTTCTTTCCACCATTGCTCTG
 TCTCTCAACACACTTCCAGAGCTGCAAGAAAACGACGAGTTTGGCAACCCAGTGACAACCCGGAAGTTGG
 CACACGTAGAGGCTGTGTGCATTGCCTGGTTTACCATGGAGTATCTTTACGATTCCTGTCTCACCAGAA
 TAAATGGAAATCTTTAAAGGCCCGCTGAATGTCATTGACCTTCTGGCCATCTTGCCATACTATGTAACC
 ATCTTCTCACCAGGCTAACAAAAGTGTGCTGCAGTTCCAGAATGTTAGACGAGTGGTCCAGATCTTCA
 GAATCATGCGTATCCTCAGGATACTGAAACTCGCCAGACACTCAACGGGCTGCAGTCTCTGGGCTTCA
 ACTCAGGCGAAGTTACAATGAGTTAGGTTTATTAATATTTCTGGCCATGGGGATAATGATATTTTCC
 AGCTTGGTGTTTTTGCTGAGAAAAGTGAAGTGTACCAATTCACCAGTATCCCTGCATCATTGTTGGT
 GGGTACCATCACCATGACCACCTGTGGCTACGGTGACATTTACCCTAAAACACTGTTAGGAAAAATTGT
 GGGTGGTCTCTGCTGCATTGCAGGAGTCCCTGGTTATTGCCCTTCTATACCCATCATTGTGAACAATTTT
 TCTGAGTTCTATAAGGAGCAAAAACGCCAGGAGAAAGCTATTAAGGAGAGAGGCTCTTGAAAGAGCCA
 AAAGAAATGGCAGCATCGTTTCTATGAACCTAAAGGATGCCTTTGCTAGAAGTATGGAACCTGATAGACGT
 GGCTGTGGAGAAGGCTGGAGAGTCAAGCAATACCAAGGACTCAGTAGATGATAATCACCTGTCTCCAAGC
 CGGTGGAAGTGGCCAGGAAGGCGCTGTGAGAAACGAGCTCAACAAATCTTACGAGAATAAGTACCAGG
 AGGTTAGCAAAATGACTCCCACGAACATCTGAACAATACTTCTCTCCAGCCACAGCATCTGAGTGC
 CCAGAAGCTGGAGATGCTATACAATGAAATCACCAGACACAGCCTCATTCCACCCGAATCCAGACTGC
 CAAGAACAGCCTGAGAGGCCATGTGTGTATGAGGAGGAGATAGAATGGAAGAGGTGATCTGCCACAGG
 AGCAGCTGGCTGTGGCACAGACCGAGGTCATCGTGGACATGAAGAGCACCTCCAGCATTGACAGCTTCA
 CAGCTGTGCCACGGACTTACAGAGACTGAGAGATCACCCCTGCCACCACCTCTGCCTCTCATTGCGAG
 ATGAAGTTCACCCAGGACCTCCCAGGAACAGATGAGCACCAAGAGCCAGGGCACCTCCATTCTTACAC
 TAAGCAGAGATAAGGGGCTGCTGCCAGGGAGGCTGCAGTGGATTATGCCCAATTGACATAACCGTGAA
 CCTCGATGCTGGGGCTTCCCATGGTCCCTTGAACCTGACAGTGCAGCGACAGCCCTAAGAGCTCGCTG
 AAAGGGAGCAATCCCCTCAAGTCAAGATCCCTCAAAGTGAACCTTTCAGGAAAACAGAGCCAGTGCACCAC
 AGACCCCGCCAGCACAGCCAGGCCACTGCCAGTAACCACAGCTGACTTCCGCTCACCCTCCCGAGCA
 CATGAGTACCATTCTTCTAGAAGAAGCCCTCCCGAGGACAGCCTCCCTTGTGGAGGCTGATGATTG
 GCACACTGTGAGGACCATCCAAAGGTTTCTCCCGACGATTTCCCAAGCAAAAACACTGTTTCTTTCTCT
 CTAGAGAAAGGAGGAGCTTCACTGAAATAGACTGAGAGAAGACGAAGACTTCTTGGACCTCCAAAGGTC
 AAGACCAGACAAGCAAGCAGATCCAGCCCAACTGCCTAGCAGATAAGCCTGGCGATGCCAGAGACTCT
 TTAAGAGAAGAGGCTGTGTGGTTCTCTCTCCCGAAGCACAGACCACAAGTGTAGGCAAGACATTT
 ACCAGGCTGTGGTGAAGTCAAAAAGGACAGTAGTCAAGAAGGTTACAAGATGGAGAACCCTTGTGTTGC
 CCCAGAAATTCATTCCAACCCAGGAGACACAGGCTACTGTCCACTCGTGAGACCAGCAT**GTA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001098528

| | |
|-------------------------------|---|
| Insert Size: | 2724 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| 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_001098528.2 , NP_001091998.1 |
| RefSeq Size: | 5309 bp |
| RefSeq ORF: | 2724 bp |
| Locus ID: | 98741 |
| UniProt ID: | A6H8H5 |
| Cytogenetics: | 1 4.5 cM |
| Gene Summary: | <p>Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes, primarily in the brain and smooth muscle cells. Channels open or close in response to the voltage difference across the membrane, letting potassium ions pass in accordance with their electrochemical gradient. Homotetrameric channels mediate a delayed-rectifier voltage-dependent outward potassium current that display rapid activation and slow inactivation in response to membrane depolarization. Can form functional homotetrameric and heterotetrameric channels that contain variable proportions of KCNB1; channel properties depend on the type of alpha subunits that are part of the channel. Can also form functional heterotetrameric channels with other alpha subunits that are non-conducting when expressed alone, such as KCNS1 and KCNS2, creating a functionally diverse range of channel complexes. In vivo, membranes probably contain a mixture of heteromeric potassium channel complexes, making it difficult to assign currents observed in intact tissues to any particular potassium channel family member. Contributes to the delayed-rectifier voltage-gated potassium current in cortical pyramidal neurons and smooth muscle cells. [UniProtKB/Swiss-Prot Function]</p> |