

Product datasheet for **MG220576**

Kcnmb4 (NM_021452) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kcnmb4 (NM_021452) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Kcnmb4
Synonyms: 1700058G18Rik; 2900045G12Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG220576 representing NM_021452
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGAAGCTCAGGGTGTCTTACGAGTACACGGAAGCCGAAGACAAGAGCATCCGGCTCGGCTTGTTC
 TCATCGTCTCCGGCATCCTGTCGCTCTTCATCTTCGGCTTCTGCTGGCTCAGTCCCGCTTCAGGATCT
 GCAAGCCACGGCGGCAACTGCACCGTGTGTCGGTGCAGCAGATCGGCGAGGTGTTGAGTGCACCTTC
 ACCTGTGGCACCAGTGCAGGGCACCTCGCAGTATCCCTGCGTCCAGGTGTACGTGAACAACCTCCGAGT
 CCAACTCCAGGGCGTGTACACAGCAGCAGCACCAGCTCCTGACCAACCCCAAGTGTCTCTATATCCC
 GCCTGTAAAGAGAGAAAACCAGAAGAACTCGGAGAGCGTCACTGAACTGGCAGCAGTATTGAAAGATGAG
 ATCGGTTCCAGCCATCACTTGCTATTTTAATCAGCATCAGAGACCAGAGGACGTTCTCTACAGCGCA
 CACACGACGAGATTGCTCTCCTGCACTGCTTCTCTGGCCGGTGGTGGCCTTTGTGGTGGGTGTTCTCAT
 CGTGGTCTGACCATCTGTGCCAAGAGCCTGGCGGTCAAGGCGGAAGCCATGAAGAAACGCAAGTCTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG220576 representing NM_021452
 Red=Cloning site Green=Tags(s)

MAKLRVSYEYEAEDKSIRLGLFLIVSGILSLFIFGFCWLSPALQDLQATAANCTVLSVQQIGEVFEFCT
 TCGTDCRGTSQYPCVQVYVNNSENSRALLHSDQHLLTNPKCSYIPCKRENQKNSESVMNWQYWKDE
 IGSQPFICYFNQHQRPEDEVLLQRTHDEIALLHCFLWPVAVFVGVLIIVLTICAKSLAVKAEAMKKRKF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

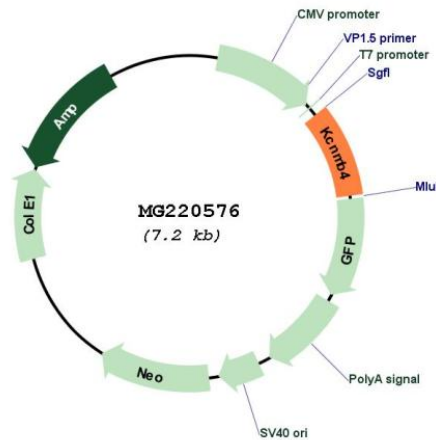


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Cloning Scheme:



Plasmid Map:



ACCN: NM_021452

ORF Size: 630 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_021452.1](#), [NP_067427.1](#)

RefSeq Size: 1032 bp

RefSeq ORF: 633 bp

Locus ID: 58802

UniProt ID: [Q9JIN6](#)

Cytogenetics: 10 D2

Gene Summary: Regulatory subunit of the calcium activated potassium KCNMA1 (maxiK) channel. Modulates the calcium sensitivity and gating kinetics of KCNMA1, thereby contributing to KCNMA1 channel diversity. Decreases the gating kinetics and calcium sensitivity of the KCNMA1 channel, but with fast deactivation kinetics. May decrease KCNMA1 channel openings at low calcium concentrations but increases channel openings at high calcium concentrations. Makes KCNMA1 channel resistant to 100 nM charybdotoxin (CTX) toxin concentrations (By similarity).[UniProtKB/Swiss-Prot Function]