

Product datasheet for MC207312

Kcnmb1 (NM_031169) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Kcnmb1 (NM_031169) Mouse Untagged Clone

Tag: Tag Free

Symbol: Kcnmb1

Synonyms: BKbeta1

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC207312 representing NM_031169

Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGAAGAGCTGGTGATGGCCCAGAAGCGCGGAGAGACACGAGCCCTCTGCCTGGGAGTGGCAATGG
TAGTGTGTGCTGCCATCACCTACTACGTCCTGGGTACAACTGTGCTGCCCCCTCTACCAGAAAAGTGTGTG
GACCCAGGAATCCATATGTCACTTGATTGAAACTAATATCAAGGACCAGGAAGAGGCTGGAGGGCAAGAAG
GTGCCCCAGTACCCATGCCTTTGGGTCAATGTATCAGCTGTGGGCAGATGGGCCATGCTGTATCACACGG
AAGACACTCGGGATCAAAACCAACAGTGCTCCTATATCCCCAGGAACCTGGACAACTACCAGACAGCCTT
GGCAGATGTGAAGAAGACCAGCCAATTTCTATAAGCACCATGAATTCTATTGCCTTTCTTCTGCACCTCAA
GTCAACGAGACCAGCGCTCGTGTACCAGCGCCCTCACGGGCCCCAAGTCCTCCTCTTCTCTCTTCTTGGC
CCACCTTCCTGCTGACAACACTCCATCTT

GGCAGCTCAGAAGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul ACCN: NM 031169

Insert Size: 576 bp



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com **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:

- 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: <u>BC013338</u>, <u>AAH13338</u>

RefSeq Size: 1199 bp
RefSeq ORF: 576 bp
Locus ID: 16533
UniProt ID: Q8CAE3
Cytogenetics: 11 A4

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. Increases the apparent Ca(2+)/voltage sensitivity of the KCNMA1 channel. It also modifies KCNMA1 channel kinetics and alters its pharmacological properties. It slows down the activation and the deactivation kinetics of the channel. Acts as a negative regulator of smooth muscle contraction by enhancing the calcium sensitivity to KCNMA1. Its presence is also a requirement for internal binding of the KCNMA1 channel opener dehydrosoyasaponin I (DHS-1) triterpene glycoside and for external binding of the agonist hormone 17-beta-

estradiol (E2). Increases the binding activity of charybdotoxin (CTX) toxin to KCNMA1 peptide blocker by increasing the CTX association rate and decreasing the dissociation rate.

[UniProtKB/Swiss-Prot Function]