

## **Product datasheet for MC208801**

## Kcnj10 (NM\_001039484) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Kcnj10 (NM\_001039484) Mouse Untagged Clone

Tag: Tag Free Symbol: Kcnj10

Synonyms: BIR10; BIRK-1; Kir1.2; Kir4.1

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC208801 representing NM\_001039484

Red=Cloning site Blue=ORF Orange=Stop codon

GAATACGCCGGAGGAGGGTCCTCACGAAAGACGGCCGGAGCAATGTGAGAATGGAGCACATTGCTGACAA ACGTTTCCTCTACCTCAAGGATCTATGGACGACCTTCATTGACATGCAATGGCGCTACAAGCTTCTGCTC TTCTCTGCAACCTTTGCAGGCACGTGGTTCCTCTTTGGTGTGGTGTGGTATCTGGTAGCTGTGGCCCATG AGCCTTCCTCTCCCCGGAATCCCAGACCACCATCGGCTATGGCTTCCGCTACATCAGTGAGGAATGC CCACTGGCCATCGTGCTTCTTATTGCGCAGCTGGTGCTCACCACCATTCTGGAAATCTTCATCACAGGTA GGCTTCCCATAACGGGAAGCCTTGCCTTATGATCCGGGTTGCCAATATGCGGAAGAGTCTCCTCATTGGA TGCCAGGTGACAGGCAAACTGCTTCAAACGCACCAGACAAAGGAGGGTGAGAATATTCGGCTCAACCAGG TCAACGTGACTTTCCAAGTAGACACAGCCTCAGACAGCCCCTTTCTCATCCTACCCCTGACTTTCTACCA CGTGGTAGATGAGACCAGCCCCTTAAAAGATCTCCCGCTCCGCAGTGGGGAGGGGGACTTTGAGCTGGTG AGATCCTCTGGGGTTACGAGTTCACGCCTGCGATCTCACTGTCAGCCAGTGGCAAATACATAGCTGACTT CAGCCTTTTCGACCAGGTTGTGAAAGTGGCATCTCCCAGTGGTCTCCGCGATAGCACCGTACGCTATGGA TGCGCATCAGCAACGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul



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**ACCN:** NM\_001039484

**Insert Size:** 1140 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by

calling 301.340.3188 option 3 for pricing and delivery.

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

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>NM 001039484.1</u>, <u>NP 001034573.1</u>

 RefSeq Size:
 5407 bp

 RefSeq ORF:
 1140 bp

 Locus ID:
 16513

 UniProt ID:
 Q9|M63

 Cytogenetics:
 1 79.69 cM

**Gene Summary:** May be responsible for potassium buffering action of glial cells in the brain. Inward rectifier

potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by extracellular barium and cesium (By similarity). In the kidney, together with KCNJ16, mediates basolateral K(+) recycling in distal tubules; this process is critical for Na(+) reabsorption at the tubules (By

similarity).[UniProtKB/Swiss-Prot Function]