

Product datasheet for **MR227309**

Kcnj6 (NM_010606) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Kcnj6 (NM_010606) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Kcnj6 |
| Synonyms: | BIR1; GIRK2; KATP2; KCNJ7; Kir3.2; weaver; wv |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR227309 representing NM_010606
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACAATGGCCAAGTTAACTGAATCCATGACTAACGTCTTGAAGGCGATTCCATGGACCAGGATGTGG
 AAAGCCCAGTGGCCATTACCAGCCAAAGTTGCCAAGCAGGCCAGGGAGACCTGCCGAGACACATCAG
 CCGAGACAGGACAAAAGGAAAATCCAGAGGTACGTGAGGAAGGATGGGAAGTGCAACGTTACCCACGGC
 AATGTGCGGGAGACGTACCGATACCTGACGGACATCTTACCACCCTGGTGGACCTGAAGTGAGATTCA
 ACCTGTTGATCTTTGTCATGGTCTACACAGTGACGTGGCTTTTCTTTGGGATGATCTGGTGGCTGATTGC
 GTACATCCGGGGAGATATGGACCACATAGAGGACCCTCGTGGACTCCTTGTGTACCAACCTCAACGGG
 TTTGTCTCTGCTTTTTATTCTCCATAGAGACAGAAACCACCATCGTTATGGCTACCGGTCATCACGG
 ACAAGTGCCCTGAGGGGATTATTCTCTCTTAATCCAGTCCGTGTGGGGTCCATTGTCAACGCCTTCAT
 GGTAGGATGTATGTTTGTAAAAATATCCCAACCAAGAAGAGGGCAGAGACCCTGGTCTTTCCACCCAC
 GCGGTGATCTCCATGCGGGATGGAAACTGTGCTTGATGTTCCGGGTGGGGGACTTGAGGAATTCTCACA
 TTGTGGAGGCATCCATCAGAGCCAAGTTGATCAAGTCCAACAGACTTCAGAGGGGGAGTTATCCCT
 CAACCAGACTGATATCAACGTGGGGTACTACACAGGGGACGACCGGCTCTTTCTGGTGTCAACATTGATT
 ATTAGCCATGAAATTAACCAACAGAGTCCCTTCTGGGAGATCTCCAAAGCGCAGCTGCCTAAAGAGGAAC
 TGGAGATTGTGGTCATCTGGAGGGAATGGTGGAAAGCCACAGGAATGACGTGCCAAGCCCCGAAGCTCCTA
 CATCACCAGTGAGATCTTGTGGGTTACCGGTTACACCTGTCTAACGCTGGAAGACGGGTTCTACGAA
 GTTGACTACAACAGCTTCCATGAGACCTATGAGACCAGCACCCCTCCCTTAGTGCCAAAGAGCTAGCGG
 AGCTGGCTAACCGGGCAGAGCTGCCTCTGAGTTGGTCTGTGTCCAGCAAACCTGAACCAACATGCAGAATT
 GGAGACAGAAGAGGAAGAGAAGAACCCGGAAGAACTGACGGAGAGGAATGGTGACGTGCCAACCTAGAG
 AATGAATCCAAAGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227309 representing NM_010606
 Red=Cloning site Green=Tags(s)

MTMAKL TESMTNVLEGSDMDQDVESPVAIHQPKLPKQARDDLPRHISRDRTRKRIQRYVRKDGKCNVHHG
 NVRETYRYLTDIFFTLVLDLKWRFNLLIFVMVYVTWLVFGMIWWLIAYIRGDMDHIEDPSWTPCVTNLNG
 FVSAFLFSIETETTIGYGYRVIDKCPEGIILLLIQSVLGSIVNAFMVGMFVKISQPKKRAETLVFSTH
 AVISMRDGKLCMLFRVGDRLNSHIVEASIRAKLIKSKQTSEGEFIPLNQTDINVGYYTGDDRLFLVSPLI
 ISHEINQQSPFWEISKAQLPKEELEIVVILEGMVEATGMTQARSSYITSEILWGYRFTPVLTELDGFYE
 VDYNFSFHETYETSTPLSAKELAE LANRAELPLSWSVSSKLNQHALETEEEEEKNPEELTERNGDVANLE
 NESKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9018_a05.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

ACCN: NM_010606

ORF Size: 1275 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 custsupport@origene.com 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](#)

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).

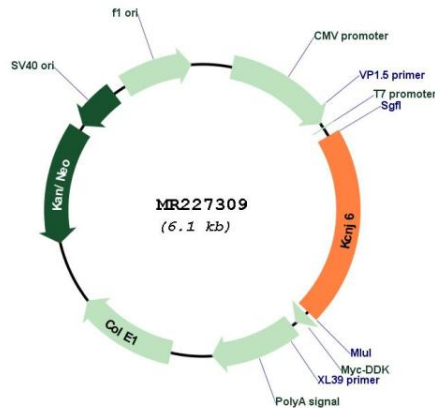
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_010606.2](#), [NP_034736.2](#)

RefSeq Size: 3086 bp
 RefSeq ORF: 1278 bp
 Locus ID: 16522
 UniProt ID: [P48542](#)
 Cytogenetics: 16 55.44 cM
 MW: 49.1 kDa

Gene Summary: This potassium channel is controlled by G proteins. It plays a role in granule cell differentiation, possibly via membrane hyperpolarization. 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.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227309