

## Product datasheet for **MG227314**

### **Kcnj6 (NM\_001025585) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj6 (NM_001025585) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnj6
Synonyms:	BIR1; GIRK2; KATP2; KCNJ7; Kir3.2; weaver; wv
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227314 representing NM_001025585 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACAATGGCCAAGTTAACTGAATCCATGACTAACGTCTTGAAGGCGATTCCATGGACCAGGATGTGG  
AAAGCCCAGTGGCCATTCACCAGCCAAAGTTGCCTAAGCAGGCCAGGGACGACCTGCCGAGACACATCAG  
CCGAGACAGGACCAAAAGGAAAATCCAGAGGTACGTGAGGAAGGATGGGAAGTGAACGTTCAACACGGC  
AATGTGCGGGAGACGTACCGATACCTGACGGACATCTTACCACCCTGGTGGACCTGAAGTGGAGATTCA  
ACCTGTTGATCTTTGTCATGGTCTACACAGTGACGTGGCTTTTCTTTGGGATGATCTGGTGGCTGATTGC  
GTACATCCGGGGAGATATGGACCACATAGAGGACCCCTCGTGGACTCCTTGTGTCACCAACCTCAACGGG  
TTTGTCTCTGCTTTTTATTCTCCATAGAGACAGAAACCACCATCGTTATGGCTACCGGTCATCACGG  
ACAAGTGCCCTGAGGGGATTATTCTCTCTTAATCCAGTCCGTGTTGGGGTCCATTGTCAACGCCTTCAT  
GGTAGGATGATGTTTGTGAAAATATCCCAACCAAGAAGAGGGCAGAGACCCTGGTCTTTTCCACCCAC  
GCGGTGATCTCCATGCGGGATGGGAACTGTGCTTGTGTTCCGGGTGGGGGACTTGAGGAATTCTCACA  
TTGTGGAGGCATCCATCAGAGCCAAGTTGATCAAGTCAAACAGACTTCAGAGGGGGAGTTTATCCCT  
CAACCAGACTGATATCAACGTGGGTACTACACAGGGGACGACCGCTCTTTCTGGTGTCCACATTGATT  
ATTAGCCATGAAATTAACCAACAGAGTCCCTTCTGGGAGATCTCAAAGCGCAGTCGCCTAAAGAGGAAC  
TGGAGATTGTGGTCATCCTGGAGGGAATGGTGAAGCCACAGGTAAGATGGGTTTCGCCCTGGGTTTTCT  
G

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG227314 representing NM\_001025585  
 Red=Cloning site Green=Tags(s)

MTMAKLTESMTNVLEGDSDQDVESPVAIHQPKLPKQARDDLPRHISRDRTKRKIQRYVRKDGKCNVHHG  
 NVRETYRYLTDIFFTLVLDLKWRFNLLIFVMVYTVTWLFFGMIWWLIAYIRGDMDHIEDPSWTPCVTNLNG  
 FVSAFLFSIETETTIGYRVIDTKCEGIIILLIQSVLGSIVNAFMVGC MFVKISQPKKRAETLVFSTH  
 AVISMRDGKLCLMFRVGLDRNSHIVEASIRAKLIKSKQTSEGEF IPLNQTDINVGYTTGDDRLFLVSPLI  
 ISHEINQQSPFWEISKAQLPKEELEIVVILEGMVEATGKMGFALGFL

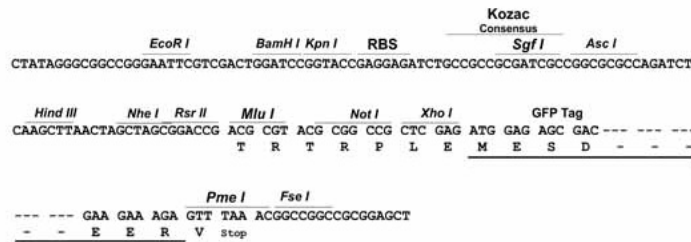
TRTRPLE - GFP Tag - V

**Restriction Sites:**

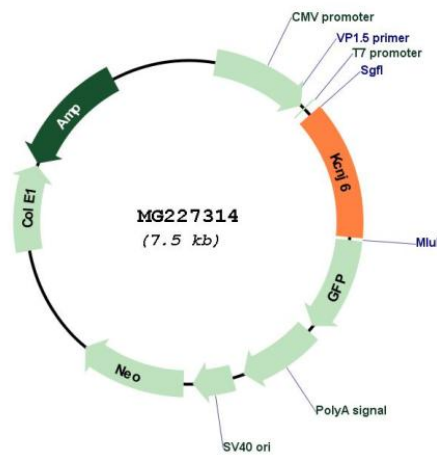
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_001025585

**ORF Size:** 981 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001025585.2</a> , <a href="#">NP_001020756.1</a>
<b>RefSeq Size:</b>	2049 bp
<b>RefSeq ORF:</b>	984 bp
<b>Locus ID:</b>	16522
<b>UniProt ID:</b>	<a href="#">P48542</a>
<b>Cytogenetics:</b>	16 55.44 cM
<b>Gene Summary:</b>	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]