

## Product datasheet for **MG223106**

### **Kcnq4 (NM\_001081142) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kcnq4 (NM_001081142) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnq4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG223106 representing NM\_001081142  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCGAGGCCCCCCCGCGCCCTCGGCCTGGGCCCCCGCCCGGGACGCCCCCGCGCGGAGTTGG  
 TGGCGCTCACGGCGTGCAGAGTGAACAGGGCGAGGCGGGCGGGCGGCTCTCCGCGTCGCTCGGCCT  
 TCTGGGACAGCCCTGCCGCGGGCGCGCCCTCCCTGGGCCGGGCTCCGGCTCGGGCTCCGCTCGCGG  
 GGCCAGCGCTCTCCGCCGCGCAGAAGCGCTACCGCCGCTGCAGAACTGGGTCTACAACGTGCTGGAGC  
 GGCCCCGCGGGTGGGCTTCGTCTACCACGTCTTCATATTTTGTAGTCTTCAGCTGCCTGGTGTCTC  
 TGTACTGTCCACCATCCAGGAGCACCAGGAACCTGCCAACGAGTGTCTCCTTATCTTGAATTCTGTATG  
 ATTGTGGTCTTTGGCTTGGAGTATATAATCCGTGTCTGGTGGCCGGATGCTGTTGTCTACAGAGGAT  
 GGCAGGGACGCTTCGCTTCGCCAGGAAACCTTCTGTGTCTCATCGACTTCATCGTGTTCGTGGCCTCGT  
 GGCAGTATAGTGCAGGACACAAAGGCAACATCTTTGCTACGTCGGGTTGCGCAGTATCGCTTCTCTA  
 CAGATCTGCGCATGGTGCATGGATCGCCGCGGTGGCACCTGGAAGCTGTTGGGATCCGTGGTCTATG  
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 CTACCTGGCTGAGAAGGATGCCAACTCTGACTTCTCCTCTATGCCGACTCGCTCTGGTGGGGGACGATC  
 ACACTGACGACCATTTGGCTATGGTGACAAGACGCCACATACATGGCTGGGCAGGGTTCTGGCTGCCGGT  
 TCGCCTTACTGGGCATCTCCTTCTTTGCCCTGCCTGCCGGCATCTGGGCTCTGGCTTTGCCCTGAAGGT  
 CCAGGAGCAGCACAGGACAGAAGCACTTTGAGAAGCGCAGGATGCCAGCAGCTAATCTCATCCAGGCTGCG  
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 CACGGAGGCAAGTGGATGAAATCAGCATGATGGGGCGCTAGTCAAGGTGAAAAGCAGGTGCAGTCCATC  
 GAACATAAGTTGGATCTGCTGCTGGGCTTCTACTCGCGCTGCCTCCGCTCTGGCACCTCGGCCAGCTGG  
 GCACTGTGCAAGTCCGCTCTTCGACCCCGACATCACCTCGGACTACCACAGCCCTGTAGACCACGAGGA  
 CATCTCTGCTCCGCACAGACGCTCAGCATCTCTGCTCAGTCAGCACCAACATGGAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG223106 representing NM\_001081142  
 Red=Cloning site Green=Tags(s)

MAEAPPRRLGLGPPPGDAPRAELVALTAVQSEQEAGGGGSPRRLGLLGSPLPPGAPLPGPGSGSGSACG  
 GQRSSAAQKRYRRLQNWVYNLRLPRGWAFVYHVFIFLLVFSCLVLSVLSTIQEHQELANECLLILEFVM  
 IVVFGLEYIIRVWSAGCCCRYRGWQGRFRFARKPFCVIDFIVFVASVAVIAAGTQGNIFATSALRSMRFL  
 QILRMVRMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLIASFVLVLAEKDANSDFSSYADSLWWGTI  
 TLTITIGYGDKTPHTWLGRLAAGFALLGISFFALPAGILGSGFALKVQEQRKHFKEKRRMPAANLIQAA  
 WRLYSTDTSRAYLTATWYYYDSILPSFRELALLFEHIQRARNGGLRPLEVRRAPVPDGAPSRYPVATCH  
 RPGSASFCPGESSRMGIKDRIRISSSQKRTGPSKQHLAPPIPTSPSSEQVGEASSPSKVQKSWSFNDRT  
 RFRASLRLLKPRCSAEEGPSEEVAEEKSYQCELTVDDVMPAVKTVIRSVRILKFLVAKRKFKETLRPYDVK  
 DVIEQYSAGHLDMLGRIKSLQARVDQIVGRGPGDRKTRKGDGKSPDTEAVDEISMGRVVKVEKQVQSI  
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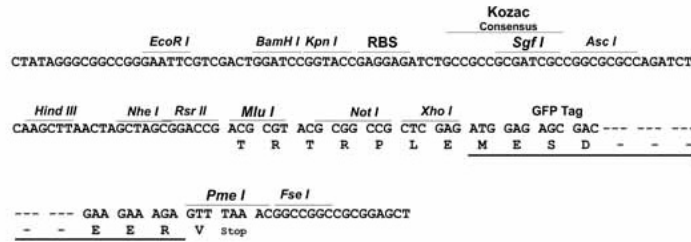
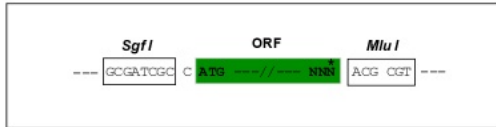
TRTRPLE - GFP Tag - V

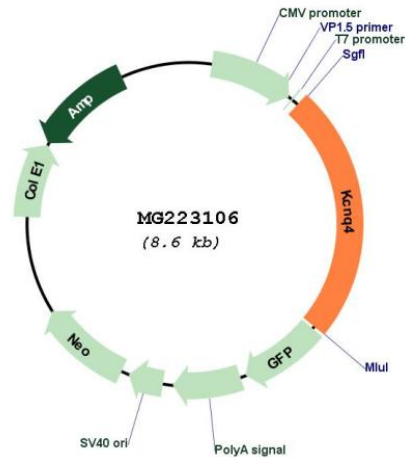
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_001081142

**ORF Size:** 2088 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\\_001081142.3](#)

RefSeq Size: 2512 bp

RefSeq ORF: 2091 bp

Locus ID: 60613

UniProt ID: [Q9JK97](#)

Cytogenetics: 4 D2.2

Gene Summary: Probably important in the regulation of neuronal excitability. May underlie a potassium current involved in regulating the excitability of sensory cells of the cochlea.[UniProtKB/Swiss-Prot Function]