

## Product datasheet for **RG216744**

### KCNJ14 (NM\_170720) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNJ14 (NM_170720) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNJ14
Synonyms:	IRK4; KIR2.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216744 representing NM_170720 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCCTGGCCAGGGCCCTACGCCGCTCAGCGGCGCCCTGGATTCGGGAGACAGCCGGGCGGGCGATG  
AAGAGGAGGCCGGGCCGGGTTGTGCCGAACGGGTGGGCGCCGGCACCGGTGCAGTCACCCGTGGGCCG  
GCGCCGGTTCGTTTCGTAAGAAAGACGGGCACTGCAACGTGCGTTTCGTAACCTGGGTGGCCAGGGC  
GCGCGCTACCTGAGCGACCTGTTACCACATGCGTGGACGTGCGCTGGCGCTGGATGTGCCTGCTCTTCT  
CCTGCTCCTTCTCGCCTCCTGGCTGCTTTCGGCCTGGCCTTCTGGCTCATTGCCTCGTGCACGGCGA  
CCTGGCCGCCCGCCACCGCCCGCCCTGCTTCTCACACGTGGCCAGCTTCTGGCCGCCTTCTCTTTC  
GCGCTGGAGACGCAGACGTCCATCGGCTACGGCGTGCAGCGTCCCGAGGAGTGCCCGCCGCTGTGG  
CCGCCGTGGTGCAGTGCATTGCCGGCTGCGTGTGCTCGACGCCCTTCGTCGTGGGTGCTGTGCATGGCCAA  
GATGGCCAAACCAAGAAGCGCAACGAGACGCTGGTCTTCAGCGAGAACGCCGTCGTGGCGCTGCGCGAC  
CACCGCTCTGCCTCATGTGGCGCGTGGCAACCTGCGCCGACGACCTGGTTCGAGGCCACCGTGCCTG  
CCCAGCTGCTGCAGCCCCGTGTGACCCAGAGGGTGAGTACATCCCGTGGACCACAGGATGTGGATGT  
GGGCTTTGATGGAGGCACCGATCGTATCTTCTCGTGTCCCCATCACCATCGTCCATGAGATCGACTCT  
GCCAGTCTCTGTATGAGCTAGGACGTGCCGAGCTGGCCAGGGTGACTTTGAGCTGGTGGTCACTTCTCG  
AGGGGATGGTTGAGGCCACAGCCATGACCACACAGTGTGCTCGTCTACCTCCCTGGTGAATGCTCTG  
GGCCATCGTTTTGAGCCAGTTCTTCCAGCGTGGCTCCAGTATGAGGTGACTATCGCCACTTCCAT  
CGCACTTATGAGGTCCCAGGGACACCGGTCTGCACTGCTAAGGAGCTGGATGAACGGGCAGAGCAGGCTT  
CCCACAGCCTCAAGTCTAGTTTCCCGGCTCTCTGACTGCATTTTGTATGAGAAATGAACCTGCTCTGAG  
CTGCTGCCAGGAGGAAGATGAGGACGATGAGACTGAGGAAGGGAATGGGGTGAACAGAAAGATGGGGCT  
GCTAGCCCCGAGTTCTCACACCAACCCTGGCGCTGACCCTGCCTCCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG216744 representing NM\_170720  
Red=Cloning site Green=Tags(s)

MGLARALRRLSGALDSGDSRAGDEEEAGPGLCRNGWAPAPVQSPVGRRRGRFVKKDGHCVRFVNLGGQG  
 ARYLSDLFTTCVDVRRWRMCLLFSCSFLASWLLFGLAFWLIASLHGDLAAPPPAPCFSHVASFLAAFLF  
 ALETQTSIGYGVRVSVTEECPAAVAAVVLQCIAGCVLDAFVVGAVMAKMAKPKKRNETLVFSENAVVALRD  
 HRLCLMWRVGNLRRSHLVEAHVRAQLLQPRVTPEGEYIPLDHQDQVDVDFDGGTDRIFLVSPITIVHEIDS  
 ASPLYELGRAELARADFELVVILEGMVEATAMTTQCRSSYLPGELLWGHFRFEPVLFQGSQYEVDRHFH  
 RTYEVPGPVCSAKELDERAEQASHSLKSSFPGSLTAFICYENELALSCCQEEDEDETEEGNGVETEDGA  
 ASPRVLPTLALTLPP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_170720

**ORF Size:** 1308 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\\_170720.1](#), [NP\\_733838.1](#)

**RefSeq Size:** 3120 bp

**RefSeq ORF:** 1310 bp

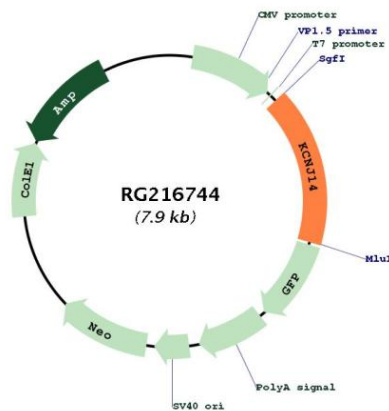
**Locus ID:** 3770

**Cytogenetics:** 19q13.33

**Protein Families:** Druggable Genome, Ion Channels: Potassium, Transmembrane

**Gene Summary:** Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel, and probably has a role in controlling the excitability of motor neurons. [provided by RefSeq, Feb 2013]

**Product images:**



Circular map for RG216744