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Product datasheet for MG206914

Kcnj14 (NM_145963) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj14 (NM_145963) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnj14
Synonyms:	A930026G01Rik; IRK4; Kir2.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG206914 representing NM_145963
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCTGGCTAGGGCCCTGCGCCGCCTGAGCGGCGCGCTGGAGCCAGGAAACAGTCGAGCTGGGGATG
AGGAAGAGGCGGGGGCCGGACTGTGCCGCAATGGGTGGGCTCCTGGACCGGTAGCTGGGAGCCGGCGCCG
CGGGCGCTTCGTCAAAAAAGATGGGCACTGCAATGTGCGCTTCGTGAATCTGGGCGGCCAGGGCGCGCGC
TACCTAAGTGACCTGTTCACCACATGTGTGGACGTGCGCTGGCGCTGGATGTGCCTGCTCTTCTCCTGTT
CCTTCCTCGCCTCCTGGTTGCTCTTCGGCCTGACCTTCTGGCTCATCGCCTCGCTGCACGGCGACCTAGC
TGCCCCACCGCCACCGGCTCCCTGTTTCTCGCAAGTGGCCAGCTTCCTGGCTGCCTTCCTCTTTGCACTG
GAGACACAGACGTCCATAGGCTATGGTGTGCGCAGCGTCACCGAGGAGTGTCCAGCTGCTGTGGCCGCTG
TGGTGCTGCAGTGCATCGCAGGCTGTGTGCTCGACGCCTTCGTCGTGGGTGCAGTTATGGCCAAGATGGC
CAAGCCCAAGAAACGCAACGAGACACTAGTCTTCAGTGAGAACGCAGTGGTGGCTCTGCGAGACCACCGT
CTCTGCCTCATGTGGCGGGTGGGCAACCTGCGACGCAGTCACCTGGTGGAAGCTCACGTGCGGGCCCAGC
TGCTGCAGCCCCGTGTGACCCCCGAGGGTGAGTACATCCCACTGGACCACCAGGATGTAGATGTTGGTTT
TGATGGAGGCACTGATCGCATCTTCCTCGTCTCCCCCATTACCATTGTGCATGAGATTGACTCTGCCAGT
CCACTGTATGAGCTGGGGCGGGCCGAGCTGGCCCGGGCTGACTTTGAGCTGGTGGTCATTCTTGAAGGTA
TGGTTGAGGCCACAGCCATGACTACACAGTGCCGCTCATCTTACCTCCCAGGTGAGCTGCTCTGGGGACA
TCGCTTCGAGCCGGTCCTCTTCCAGCGTGGCTCCCAGTATGAGGTTGACTATCGCCACTTCCATCGAACA
TATGAGGTCCCAGGGACACCAGTCTGCAGTGCCAAGGAGCTGGATGAACGGGCAGAGCAGGCTTCCCACA
GCCCTAAGTCAAGTTTCCCTGGCTCCCTCACTGCATTTTGTTATGAGAATGAACTTGCTCTGAGCTGCTG
CCAGGAGGAAGATGAGGAGGAGGACACTAAGGAGGGGACTTCAGCAGAGACCCCAGAGAGGGCTGCCAGC
CCCCAAGCTCTTACACCAACCCTGGCTCTGACCCTGCCTCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

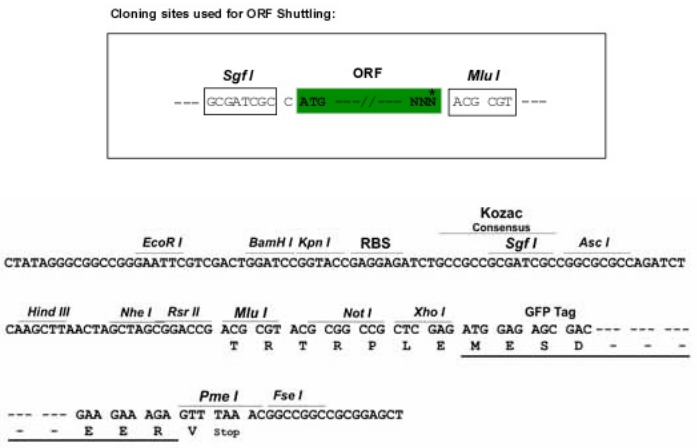
>MG206914 representing NM_145963
Red=Cloning site Green=Tags(s)

MGLARALRRLSGALEPGNSRAGDEEEAGAGLCRNGWAPGPVAGSRRRGRFVKKDGHCNVRFVNLGGQGAR
YLSDLFTTCVDVRWRWMCLLFSCSFLASWLLFGLTFWLIASLHGDLAAPPPPAPCFSQVASFLAAFLFAL
ETQTSIGYGVRSVTEECPAAVAAVVLQCIAGCVLDAFVVGAVMAKMAKPKKRNETLVFSENAVVALRDHR
LCLMWRVGNLRRSHLVEAHVRAQLLQPRVTPEGEYIPLDHQDVDVGFDGGTDRIFLVSPITIVHEIDSAS
PLYELGRAELARADFELVVILEGMVEATAMTTQCRSSYLPGELLWGHRFEPVLFQRGSQYEVDYRHFHRT
YEVPGTPVCSAKELDERAEQASHSPKSSFPGSLTAFCYENELALSCCQEEDEEEDTKEGTSAETPERAAS
PQALTPTLALTLPP

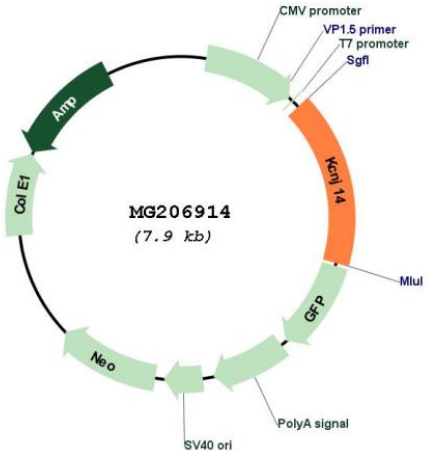
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_145963

ORF Size:	1302 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_145963.2, NP_666075.1
RefSeq Size:	2639 bp
RefSeq ORF:	1305 bp
Locus ID:	211480
UniProt ID:	Q8JZN3
Cytogenetics:	7 B3
Gene Summary:	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. KCNJ14 gives rise to low-conductance channels with a low affinity to the channel blockers Barium and Cesium (By similarity).[UniProtKB/Swiss-Prot Function]