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Product datasheet for MG226304

Kcnk18 (NM_207261) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnk18 (NM_207261) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnk18
Synonyms:	Gm781; Tresk; Tresk-2; Trik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG226304 representing NM_207261
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGCTGAGGAGCCACCTGAGGCCAGGAGATGCTGTCCCGAGGCCCTGGGGAAGGCCAGGGGATGCT
GCCCCGAAGCCCTGGGCAAGCTTCTGCCCGGCCTCTGCTTCCTTTGCTGCCTGGTGACCTATGCGCTGGT
GGGTGCTGCTCTCTTCTCCGCTGTCGAGGGCCGCCCTGACCCAGAAGCAGAGGAGAACCCTGAGTTGAAG
AAGTTCCTGGACGATCTGTGCAACATCCTGAAATGTAACCTGACAGTGGTTGAAGGTAGCAGGAAGAACT
TGTGTGAGCATCTGCAACACCTCAAGCCCCAGTGGCTCAAGGCGCCCCAGGACTGGTCCTTCCTGAGCGC
TCTCTTCTTCTGCTGCACAGTGTTCAGCACAGTGGGTTATGGCCACATGTACCCTGTCACCAGGCTCGGT
AAGTTCCTGTGCATGCTGTATGCGCTCTTTGGAATCCCTCTAATGTTCCTGGTCCTCACAGACATAGGAG
ATATCCTGGCCACCATCTTATCCAGGGCTTACAGTCGGTTCCAGGCTCTCCTTTGCCTCCCCCACGATAT
CTTCAAATGGCGCTCCCTCCCGCTCTGCCGGAAGCAGCCTGACAGCAAACCGGTGGAGGAAGCCATCCCT
CAGATTGTCATTGATGCTGGTGTGGATGAACTCCTAAACCCGCAGCCCAGCAAGGACCCCCCCTCTCCGA
GCTGCAATGTGGAGCTGTTTGAGAGATTAGTTGCCCGTGAGAAAAAGAACAAGCTACAACCACCCACGCG
TCCCGTGGAGAGGAGCAACTCCTGTCCCGAGCTGGTGCTGGGGCGACTGTCCTGTTCTATTCTCAGCAAT
CTGGATGAAGTGGGCCAGCAGGTGGAGAGGCTGGACATCCCTCTCCCCGTCATCGCCCTGGTCGTCTTTG
CATACATCTCCTGCGCGGCTGCTATCCTCCCCTTCTGGGAGACCGAGCTAGGCTTCGAGGATGCTTTCTA
CTTCTGCTTTGTGACACTGACCACCATCGGGTTTGGGGACATCGTGCTGGTGCACCCTCATTTCTTCCTC
TTCTTCTCCATCTACATCATCGTGGGCATGGAGATCCTGTTCATTGCCTTCAAGCTGATGCAGAACCGGC
TCCTGCACACCTACAAAACCCTCATGCTGTTTGTTTGCCAAAGGGAAGTTTCGCTACCTTGG

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

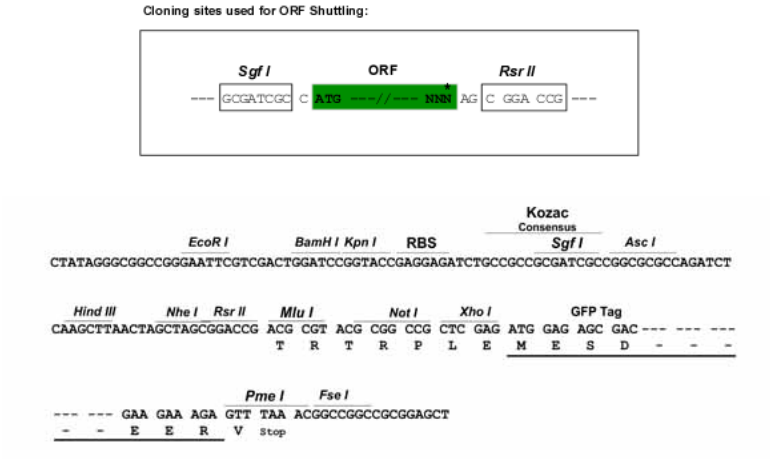
>MG226304 representing NM_207261
Red=Cloning site Green=Tags(s)

MEAEEPPEARRCCPEALGKARGCCPEALGKLLPGLCFLCCLVTYALVGAALFSAVEGRPDPEAEENPELK
KFLDDLCNILKCNLTVVEGSRKNLCEHLQHLKPQWLKAPQDWSFLSALFFCCTVFSTVGYGHMYPVTRLG
KFLCMLYALFGIPLMFLVLTDIGDILATILSRAYSRFQALLCLPHDIFKWRSLPLCRKQPDSKPVEEAIP
QIVIDAGVDELLNPQPSKDPPSPSCNVELFERLVAREKKNKLQPPTRPVERSNSCPELVLGRLSCSILSN
LDEVGQQVERLDIPLPVIALVVFAYISCAAAILPFWETELGFEDAFYFCFVTLTTIGFGDIVLVHPHFFL
FFSIYIIVGMEILFIAFKLMQNRLLHTYKTLMLFVCQREVSLPW

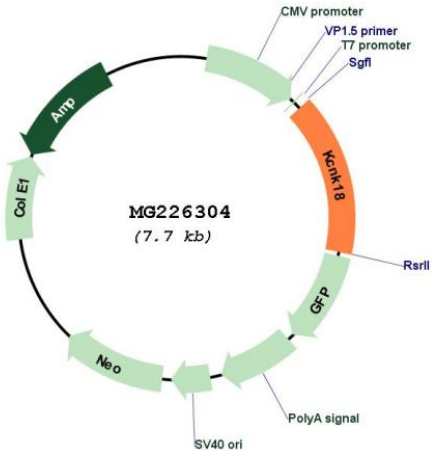
SGPTRTRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_207261

ORF Size:	1182 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_207261.3, NP_997144.1
RefSeq Size:	3032 bp
RefSeq ORF:	1185 bp
Locus ID:	332396
UniProt ID:	Q6VV64
Cytogenetics:	19 D3
Gene Summary:	Outward rectifying potassium channel. Produces rapidly activating outward rectifier K(+) currents. May function as background potassium channel that sets the resting membrane potential. Channel activity is directly activated by calcium signal. Activated by the G(q)-protein coupled receptor pathway. The calcium signal robustly activates the channel via calcineurin, whereas the anchoring of 14-3-3/YWHAH interferes with the return of the current to the resting state after activation. Inhibited also by arachidonic acid and other naturally occurring unsaturated free fatty acids. Channel activity is also enhanced by volatile anesthetics, such as isoflurane. Appears to be the primary target of hydroxy-alpha-sanshool, an ingredient of Schezuan pepper. May be involved in the somatosensory function with special respect to pain sensation.[UniProtKB/Swiss-Prot Function]