

Product datasheet for MR229275

Kcnk2 (NM_001281848) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnk2 (NM_001281848) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnk2
Synonyms:	A430027H14Rik; AI848635; TREK-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR229275 representing NM_001281848 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAAGACAGTCTCCACGATTTCTGGTGGTCGTCCTACCTGATCATCGGAGCCACGGTGTCAAG
GCATTGGAGCAGCCTCAGGAGATTTCCAGAGGACCACCATTGTGATCCAGAAGCAGACCTTCATAGCCC
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GGGACTGGCTACGGGTGATCTTAAGAAGACGAAGGAAGGTGGGAGAGTTCAGAGCGCATGCCGCTG
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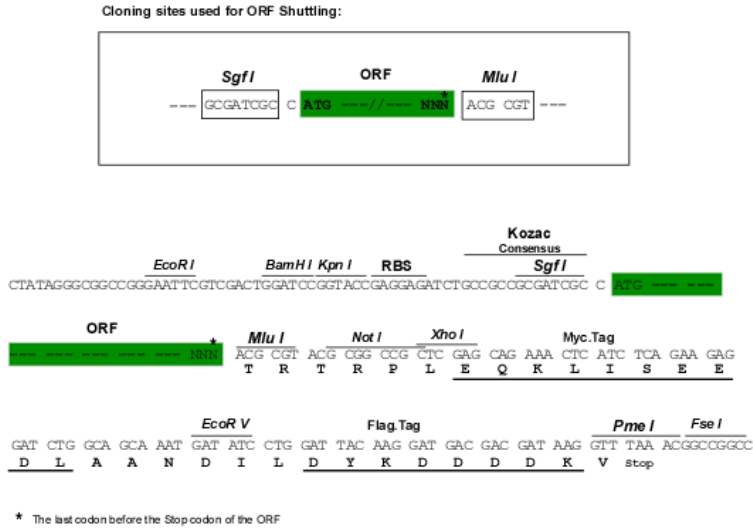
Protein Sequence: >MR229275 representing NM_001281848
 Red=Cloning site Green=Tags(s)

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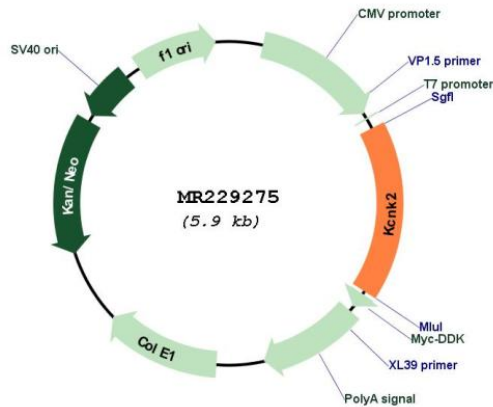
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001281848

ORF Size: 987 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:	<ol style="list-style-type: none"> 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_001281848.1 , NP_001268777.1
RefSeq Size:	3155 bp
RefSeq ORF:	990 bp
Locus ID:	16526
Cytogenetics:	1 H6
MW:	36.9 kDa
Gene Summary:	Ion channel that contributes to passive transmembrane potassium transport. Reversibly converts between a voltage-insensitive potassium leak channel and a voltage-dependent outward rectifying potassium channel in a phosphorylation-dependent manner. In astrocytes, forms mostly heterodimeric potassium channels with KCNK1, with only a minor proportion of functional channels containing homodimeric KCNK2 (PubMed:24496152). In astrocytes, the heterodimer formed by KCNK1 and KCNK2 is required for rapid glutamate release in response to activation of G-protein coupled receptors, such as F2R and CNR1 (PubMed:24496152).[UniProtKB/Swiss-Prot Function]