

Product datasheet for **RR213968**

Kcna4 (NM_012971) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcna4 (NM_012971) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcna4
Synonyms:	KCHAN; Kv1.4; Kv4; RHK1; RK3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RR213968 representing NM_012971
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGAGGTGGCAATGGTGTGAGTGCCGAGAGCTCAGGGTGCACAGCCACATGCCTTATGGTTATGCTGCC
AGGCCAGGGCTCGAGAGAGGGAGAGACTTGCTCACTCCAGGGCAGCTGCAGCTCTGGCTGTTGCAGCTGC
CACGGTCTCGGTGGAAGGCACTGGAGGTTCTGGTGGAGGCCCCACCATCATCATCAGACACGTGGGGCC
TACTCCTCCCATGATCCTCAAGGAAGCCGAGGTAGTCGGAGGAGGAGGCGACAGCGAACTGAGAAGAAGA
AACTCCACCACAGGCAGAGCAGTTTTCTCATTGCTCAGACCTGATGCCAGTGGCTCTGAAGAGAAGAT
CCTTAGGGAGCTGAGCGAGGAGGAGGAAGACGAGGAGGAGGAAGAGGAGGAGGAAGAGGAGGGAAGGTTT
TACTATAGTGAAGAGGACCATGGGGATGGGTGTTCTACACTGACCTACTGCCACAGGATGATGGGGTG
GCGGGCTACAGTTCAGTCCGCTACAGTGACTGTTGTGAACGCGTGGTAATAAATGTGTCTGGTCTACG
CTTCGAAACCCAAATGAAAACCTTGGCTCAGTTCCAGAACTCTGTTGGGAGACCTGAGAAGAGGACT
CAGTACTTCGACCCTTTCGCAATGAGTATTTTTTGTAGGAACCGTCCAGCTTTGATGCCATTTTGT
ATTATTACCAGTCAGGAGGCCGCTGAAGAGGCCAGTCAATGTCCCTTTGATATCTTCACTGAGGAGGT
GAAGTTCTATCAGTTGGGAGAGGAAGCCCTGCTCAAGTCCGTGAGGATGAGGGCTTTGTGAGAGAAGAG
GAGGACAGGGCTCTGCCAGAAAATGAATTTAAAAACAGATTTGGCTTCTTTGAATATCCCGAGAGTT
CCAGCCCTGCCAGGGCGATAGCCATCGTATCTGTCCTGGTCATCTTAATCTCTATTGTATATTTGCT
GGAAACCTTGCCTGAGTTCAGGGATGATAGGGACCTCATATGCCCTCAGCGCAGGTGGACACAGCAGA
TTATTGAATGACACCTCGGCACCCACCTGGAGAACTCAGGGCACACAATATTCAATGACCTTTCTTCA
TTGTGGAGACAGTATGTATCGTGTGGTTTTCTTTGAGTTTGTGGTTCGATGCTTTGCTTGCCAGTCA
AGCACTCTTCTTCAAAAACATCATGAACATCATTGATATCGTCTCCATTTTGCCTTACTTCATCACTCTG
GGCACCGATCTGGCCAGCAGCAGGGGGTGGCAACGGCCAGCAGCAGGCTATGTCTTTGCCATCC
TCAGGATCATCCGTCTGGTCCGAGTGTCCGGATCTTCAAGCTCTCCAGACACTCCAAGGGCCTGCAGAT
CCTGGGCCACACCCTAAGAGCCAGCATGCGTGAAGTGGGCTTCTTATCTTTTCTTCTCATCGGGGTC
ATCCTTTTTCCAGCGCTGTGTATTTGCAGAGGCAGATGAACCTACCACCCATTTCAAAGCATTCCAG
ATGCGTTTTGGTGGCTGTGTAACCATGACAAGTGTGGGCTACGGGGACATGAAGCCCATCACAGTGG
AGGAAAGATTGTGGGTCCTGTGTGCCATTGCGGGTGTCTTAACCATGCTTTGCCCGTCCGGTGATT
GTGTCTAACTTTAACTATTTCTACCACAGAGAGACTGAAAACGAAGAACAGCCAGCTGACCCAAAACG
CAGTCAGTTGCCATACCTACCTTCTAATTTGCTCAAGAAATTCGGAGCTCTACTTCTTCTTCCCTGGG
GGACAAGTCAGAGTATCTAGAGATGGAAGAAGGGGTCAAGGAGTCTTTATGTGGAAGGAAGAGAAGGT
CAGGAAAGGGGGATGACAGCGAGACAGATAAAAACTGTTCTAATGCAAAGGCTGTGGAGACTGATG
TG

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR213968 representing NM_012971
 Red=Cloning site Green=Tags(s)

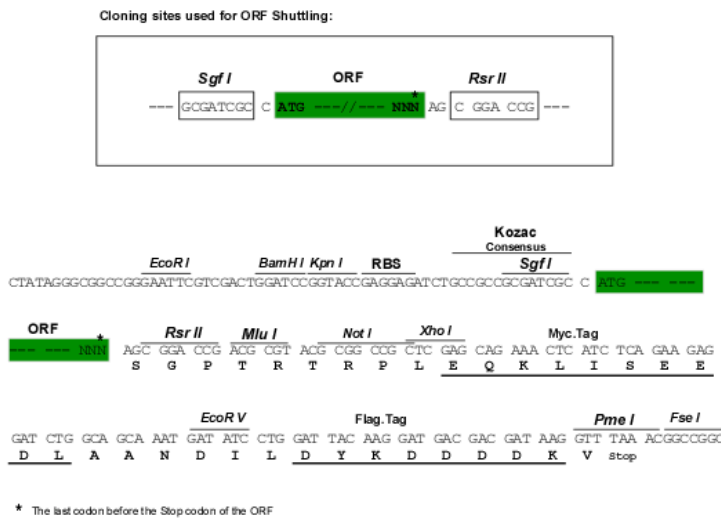
MEVAMVSAESSGCNSHMPYGYAAQARARERERLAHSRAAAALAVAAATAAVEGTGGSGGGPHHHQTRGA
 YSSHDPQGSRRGSRRRRQRTEKKKLHHRQSSFPHCSLMPGSEEKILRELSEEEEEEEEEEEEEEGRF
 YYSEEDHGDGCSYDILLPQDDGGGGGYSSVRYSDCCERVVINVSLRFETQMKTLAQFPETLLGDPEKRT
 QYFDPLRNEYFFDRNRPSFDAILYYYQSGGRLKRPVNVVDFDIFTEEVKFYQLGEEALLKFREDEGFVREE
 EDRALPENEFKKQIWLLFEYPESSPARAIAIVSVLVILISIVIFCLETLPEFRDDRDLIMALSAGGHSR
 LLNDTSAPHLENSGHTIFNDPFFIVETVCIVVFSFEFVVRFCACPSQALFFKNIMNIIDIVSILPYFITL
 GTDLAQQQGGNGQQQAMSFAILRIIRLVRFRIKLSRHSKGLQILGHTLRASMRELGLLIFFLFIGV
 ILFSSAVYFAEADEPTTHFQSIPTDAFWAVVTMTTVGYGDMKPIITVGGKIVGSLCAIAGVLTIALPVPVI
 VSNFNFYHRETENEEQTQLTQNAVSCPYPNSLLKKFRSSTSSSLGDKSEYLEMEEGVKESLCGKEEK
 QKGDDSETDKNNCSNAKAVETDV

SGP TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

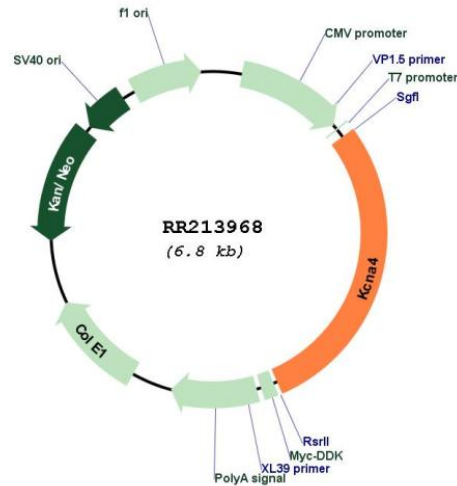
Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_012971

ORF Size: 1962 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_012971.2](#), [NP_037103.1](#)

RefSeq Size: 3125 bp
RefSeq ORF: 1965 bp
Locus ID: 25469
UniProt ID: [P15385](#)
Cytogenetics: 3q33
MW: 73.5 kDa
Gene Summary: voltage-gated K⁺ channel; responsible for potassium permeability in excitable membranes [RGD, Feb 2006]