

Product datasheet for **RR213936**

Kcnv1 (NM_021697) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnv1 (NM_021697) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnv1
Synonyms:	Kv8.1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR213936 representing NM_021697
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGATCTGTACCCCGCAACCGCCGCTTCTGGACTCGTCTCGCTGGACAGTGGCTCCCTGACCTCGC
 TGGACTCCAGCGTCTTCTGCAGCGAGGGCGAAGGGGAACCTTGGCTCTGGGGACTGCCTTACGGTCAA
 CGTGGGAGGCAGCCGCTTCGTGCTCTCTCAGCAAGCTCTGTCTGCTTCCCGCACACGCGCTGGGCAAA
 CTGGCCGTGGTGGTGGCCTCCTACCGCCGCTGGGCGCCCTGGCTGCAGCCCCAGCCCCTTGGAGCTTT
 GTGATGATGCCAACCCGGTAGACAACGAGTACTTCTCGACCGCAGCTCTCAGGCATTCCGTTATGTCT
 AACTATTATCGCACTGGCCGCTTGCACGTCATGGAGCAGCTCTGTGCACTCTCCTTTCTCAGGAGATC
 CAGTACTGGGGCATCGATGAACCTCAGCATCGACTCCTGCTGCAGGGACAGATACTCAGAAGAAAGGAGC
 TGAGTAAACTCTTGACTTCAAGAAGGACACAGATGACCAGGAAAGTCAACATGAGAGTGAACAGGACTT
 CTCACAAGGACCTTGCCTACCGTCCGACAAAAGCTCTGGGATATTCTGGAGAAGCTGGGTCTCCACA
 GCAGCCCGGATCTTTGGAGTGATCTCCATCATTTTTGTGGCAGTGCCATCGTCAACATGGCCCTGATGT
 CAGCTGAGCTAAGCTGGCTCAACCTACAGCTGCTGGAGATTTGGAGTATGTGTGCATCAGTTGGTTTAC
 CGGGGAGTTTCTGCGCTTCTGTGTGTGAAAGACAGGTGCCACTTCTGAGGAAGGTTCCAAACATC
 ATAGACCTCCTTGCCATCTTGCCCTTCTACATAACTCTTCTGGTGGAAAGCTGAGCGGCAGCCACACCA
 CCCAAGAGCTGGAAAATGTAGGACGCTCTGGTCCAGTTTTGAGGCTCCTTAGAGCTCTGCGCATGCTGAA
 GCTGGGAAGGCATTCTACAGGATTGCGCTCACTGGGATGACAATCACCCAGTGCATGAAGAAGTCGGC
 CTACTGCTCCTGTTTCTATCTGTGGAAATTTCTATATTTTCAACAATAGAATACTTTCAGAGCAAAGCA
 TTCTGTATACAACCTTCAAGTGTTCCTTGTGCATGGTGGTGGCCACAACATCCATCAGTACAGTAGG
 ATATGGGGACATTAGACCAGACACCAGCAGGCAAAATCGTGGCCTTCATGTGTATTCTATCAGGAATC
 CTTGTCTTGGCCTTGCCTATTGCCATTATTAATGATCGCTTCTCTGCTTGTATTTCACCTTGAACCTCA
 AGGAAGCAGCTGTGAGACAGCGTGAAGCTCTCAAGAAGCTTACCAAGAATATAGCCACTGACTCATAAT
 TAGTGTTAACCTGAGGGATATCTATGCCCGGAGCATCATGGAGATGCTTCGATTAAGGGCAGGGAGAGA
 GCGAGTACTAGAAGCAGTGGTGGAGATGATTTCTGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR213936 representing NM_021697
 Red=Cloning site Green=Tags(s)

MDLSPRNRPLLDSSSLDSGLTSLDSSVFCSEGEPLALGDCLTVNVGGSRFVLSQQALSCFPHTRLGK
 LAVVVASYRRLGALAAAPSPLELCDDANPVDNEYFFDRSSQAFRYVLYHYRTGRLHVMEQLCALSFQEI
 QYWGIDELSIDCCRDRYFRKELSETLDFKKDQDQESQHESEQDFSQGPCPTVRQKLWDILEKPGSST
 AARIFGVISIIIFVAVSIVNMLMSAELSWLNLQLEILEYVCISWFTGEFILRFLCVKDRCHFRLKVPNI
 IDLLAILPFYITLLVESLSGSHTTQELENVGRLVQVLRLLRALRMLKLRHSTGLRSLGMTITQCIEEVG
 LLLLFLSVGISIFSTIEYFAEQSIPDTTFTSVPCAWWWATTSMTTVGYGDIRPDTTGGKIVAFMCILSGI
 LVLALPIAINDRFSAFYFLKLEAAVRQREALKLTNIATDSYISVNLRLDIYARSIMEMRLKGRER
 ASTRSSGGDFWF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

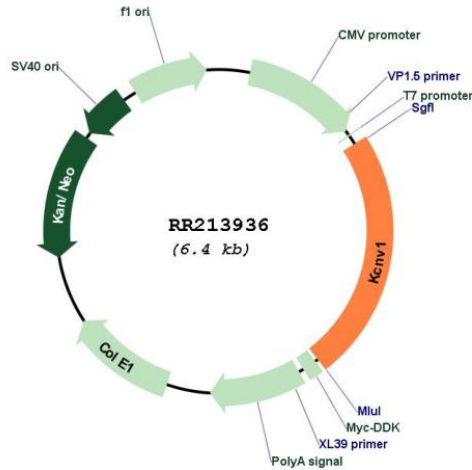
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_021697

ORF Size: 1509 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_021697.1](#), [NP_067729.1](#)

RefSeq Size: 2325 bp

RefSeq ORF: 1512 bp

Locus ID: 60326

UniProt ID: [P97557](#)

Cytogenetics: 7q31

MW: 56.7 kDa

Gene Summary: potassium channel alpha subunit that is able to form functional K⁺ channels by itself but can also form heteromultimeric K⁺ channels with other alpha subunits and modulate the channel properties from those seen with the parent channel [RGD, Feb 2006]