

## Product datasheet for **RR213756**

### **Kcnc4 (NM\_001122776) Rat Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                       |
| Product Name:             | Kcnc4 (NM_001122776) Rat Tagged ORF Clone |
| Tag:                      | Myc-DDK                                   |
| Symbol:                   | Kcnc4                                     |
| Mammalian Cell Selection: | Neomycin                                  |
| Vector:                   | pCMV6-Entry (PS100001)                    |
| E. coli Selection:        | Kanamycin (25 ug/mL)                      |



[View online »](#)

**ORF Nucleotide Sequence:**

>RR213756 representing NM\_001122776  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGATCAGCTCGGTGTGTCTCTCTACCGCGGGCGAAGTCGGGAACAAGCCTCCGTCAAAAACAT  
 GTCTGAAGGAGGAGATGGCCAAGGGCGAGGCGTCGGAGAAGATCATCAACGTGGGCGGCACCGGACA  
 TGAGACCTACCGCAGCACCCCTGCGCACCCCTACCGGCACCCGCTTGCCTGGCTGGCGGATCCCGACGGC  
 GGGGGTCGGCCAGAGTCGGATGGCGGGGTGCAGGCAGCAGCGGCAGCAGCGGGCGGGGGGCTGTG  
 AGTTCTTCTTTGATCGGCACCCGGGTGTTTTGCCTATGTGCTCAACTACTACCGCACGGCAAGCTGCA  
 TTGCCCCGACAGCTCTGTGGCCTCTCTTTGAGGAAGAGCTCACTTTCTGGGTATCGATGAGACAGAT  
 GTGGAACCCTGCTGCTGGATGACCTACCGGCAGCACCGGATGCTGAAGAGGCACTGGACATCTTCGAGA  
 GCCCGGACGGGGCGGGGTGGCGAGGCCCGCGCAGGCTGGAGACGATGAGCGGGAGTTGGCCTT  
 GCAGCGCTGGGCCCCATGAAGGAGGCTCTGGCCCTGGTGTGGTCCGGGGTTGCCGTGGCTGGCAG  
 CCCGAATGTGGGCGCTCTTCGAGGACCCGACTCATCCCGGGCGGCCAGGGTGGTAGCCTTTGCCCTCTC  
 TCTTCTCATCTTGGTCTCCATTACCACCTTCTGCCTGGAGACCCACGAGGCCTCAACATTGACCGAAA  
 TGTGACGGAGATCCACGGGTAGGGAATATCACCAGCGTGCCTTCCGGCGGGAGGTAGAAAACAGAACCC  
 ATTCTTACCTACATCGAGGGCGTGTGCGTGATGTGGTCACTCTAGAGTTCTGGTTGCGATTGTGTGCT  
 GCCCTGATACGTTGGACTTTGTCAAGAACCTGCTCAACATCATCGACTTTGTGGCCATCTTGGCCTTTTA  
 CCTGGAGTGAGTGGCCTGTATCCAAGCAGCTCGAGATGTGCTGGGTTTCTGCGTGTGGT  
 CGCTTTGTACGCATCTTCGGATCTTCAAGCTCACACGCCACTTTGTGGGGTGGTGTGCTCGGCCACA  
 CACTCCGGGCCAGCACCAACGAGTCTCTGCTGTTATCATCTTCTGGCCCTGGGTGTGCTCATCTTTGC  
 CACCATGATCTATTATGCTGAGCGAATCGGGGCCAGGCCATCTGACCCACGGGGCAATGACCACACCGAC  
 TTCAAGAACATCCCCATCGGTTTCTGGTGGGCTGTGGTACCATGACAACGCTTGGCTATGGGGACATGT  
 ATCCTAAGACATGGTCAGGAATGCTGGTGGGTGCGCTGTGTGCACTGGCTGGTGTGCTAACCATTGCCAT  
 GCCTGTGCTGTATCGTCAATAACTTTGGTATGTACTACTCCCTGGCTATGGCCAAGCAGAAGCTTCCC  
 AAGAAACGAAAGAAGCATGTACCACGGCCACCCAGCTTGAGTCAACCCATTTACTGCAAGCTGAGGAGA  
 CTTACCCCGGGACAGCACCTACAGTGACACCAGCCCCCTGCCCGGAAGAGGGTATGGTCGAGAGGAA  
 ACGAGCAGACTCCAAGCAGAATGGTACGCTAATGCGGTGCTGTCCGATGAGGAGGGAGCTGGCCTCACC  
 CAGCCCCCTGGCCTCGGCCCCACCCCTGAAGAGCGTGCAGCCCTGAGACGCTCAGGCACACGGGACAGAA  
 ACAAGAAGGCAGCTGCCTGCTTCTGCTCAGTGTGGGGACTATGCCTGTGCTGATGGCAGTGTCCAGAA  
 AGAAGGCAGTGTGAGCCGAAAGCGTGGTCCCAGTGTCTCACACCTGTGCTCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR213756 representing NM\_001122776  
 Red=Cloning site Green=Tags(s)

MISSVCVSSYRGRKSGNKPPSKTCLKEEMAKGEASEKIIINVGGTRHETYRSTLRLPLGTRLAWLADPDG  
 GGRPESDGGGAGSSGSSGGGGCEFFDRHPGVFAYVLNYYRTGKLGHPADVCGPLFEEELTFWGIDET  
 VEPCCWMTYRQHRDAEEALDIFESPDGGGGGAGPGDEAGDDERELALQRLGPHEGGSGPGAGSGGCRGWQ  
 PRMWALFEDPYSSRAARVAFASLFFILVSIITTFLETHEAFNIDRNVTEIHRVGNITSVRFREVETEP  
 ILTYIEGVCMWFLEFLVRIVCCPDTLDFVKNLLNIIDFVAILPFYLEVGLSGLSSKAARDVLFGLRVV  
 RFVRIIRIFKLTRHFVGLRVLGHTLRASNEFLLLIIFLALGVLIFATMIYYAERIGARPSDPRGNDHTD  
 FKNIPIGFVAVVTMTTLGYGDMYPKTWSGMLVGCALAGVLTAMPVPIVNNFGMYSLAMAKQKLP  
 KKRKHHVPRPPQLESPIYCKSEETSPRDSTYSSTPPAREEGMVERKRADSKQNGDANAVLSDEEGAGLT  
 QPLASAPTPERRALRRSGTRDRNKAAACFLLSAGDYACADGSVQKEGSVEPKACVPVSHTCAL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001122776

**ORF Size:** 1875 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\\_001122776.1](#), [NP\\_001116248.1](#)

**RefSeq Size:** 2858 bp

**RefSeq ORF:** 1878 bp

**Locus ID:** 684516

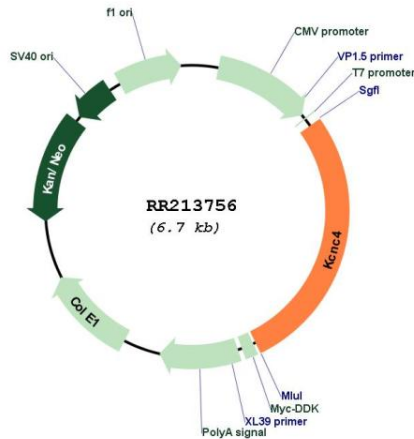
**UniProt ID:** [Q63734](#)

**Cytogenetics:** 2q34

**MW:** 68.4 kDa

**Gene Summary:** This protein mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RR213756