

## Product datasheet for **MR218493**

### **Kcna7 (NM\_010596) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                      |
| Product Name:             | Kcna7 (NM_010596) Mouse Tagged ORF Clone |
| Tag:                      | Myc-DDK                                  |
| Symbol:                   | Kcna7                                    |
| Synonyms:                 | Kv1.7                                    |
| Mammalian Cell Selection: | Neomycin                                 |
| Vector:                   | pCMV6-Entry (PS100001)                   |
| E. coli Selection:        | Kanamycin (25 ug/mL)                     |



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**ORF Nucleotide Sequence:**

>MR218493 representing NM\_010596  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTATTTTTACCCGCCGACACCCGACACCCGACTGGGGTGGCTGCGGGCTCGGGGCCACACGTCCTGTT  
 CACCGGTGCGCCGGCTGTGCGCCCATGGAGCCACGGTGCCCGCGCCCTGCGGCTGCTGCGAGCGGCT  
 GGTGCTCAACGTGGCCGGTTGCGCTTCGAGACCCGCGCGCACGCTCGGCCGCTTCCCGACACGCTG  
 CTGGGGGACCCGGTGCGCCGAGCCGCTTCTACGACGGCGCGCGCGAGTATTTCTCGACCGACACC  
 GGCCAGCTTCGATGCGGTGCTCTACTACTACCAGTCGGCGGCCGGCTGAGACGGCCGGCGCACGTGCC  
 CCTCGACGCTTCTCTGGAGGAGGTGCTTCTACGGGTGGGCGCGCGCGCTGGCGGGCTGCGGGAG  
 GACGAGGGCTGCGCGGTGCCGCCGAGCGGCCGCTGCCCGCGCGCCTTTGCGCGTCAGCTCTGGCTGC  
 TCTTCGAATTTCTGAGAGCTCGCAGGCTGCGCGCTGCTCGCCGTGGTCTCCGTAATCGTCATCCTGGT  
 CTCATCGTGGTCTTTGCTCGAGACTGCCAGACTTCGCGACGACCGCGATGACCCGGGGCTCGCG  
 CCCGTAGCCGCTGCTACTGGCCGTTTCTCGCCGACTGAATGGTCCAGTCCCATGCCAGGAGCCCTC  
 CCCGACAGCCCTCAACGATCCATTCTTTGGTGGAGACCCTGTGTATCTGCTGTTTCTCTTTGAGCT  
 GCTGGTGCCTGCTGGTGGCCTGCCCTAGCAAAGCTGTGTTCTTCAAGAATGTGATGAACCTAATTGACTTC  
 GTGGCCATCCTGCCTTACTTCGTGGCCCTGGGCACGGAGTTAGCCCGGACGCGGGGTGTGGGCCAGCCGG  
 CTATGTCCTGGCCATCCTAAGGGTCATCCGATTGGTGCCTGCTTCCGCATCTTCAAGCTCTCCAGGCA  
 TTCGAAGGGTCTACAGATCTTGGGTGAGACTGCGGGCTCCATGCGTGAGCTAGGTCTCCTCATCTTC  
 TTCCTCTTATTGGCGTGGTCTCTTTCCAGCGAGTCTACTTTGCTGAAGTGGACCCGGTGGACACCC  
 ATTTACACAGCATCCCGGAGTCTTTGGTGGCAGTGGTACCATGACCAGGTTGGCTATGGGACAT  
 GGCACCCGTACCGTGGGTGGCAAGATCGTGGCTCTCTGTGTGCCATTGCAGGTGCTACCATCTCT  
 CTGCCTGTGCCTGTCACTTGTCTTAACCTTAGCTACTTTACCACCGGGAGACAGAGGGCAAGAGGCGAG  
 GGATGTACAGCCATGTGGACACACAGCCCTGCGGTACCCTGGAGGGCAAGGCTAATGGGGGGCTGGTGA  
 CTCTGAGGTGCCTGAACCTCCACCCTCTGGCCCCCTGCAGGGAAACACATGGTGACTGAGGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR218493 representing NM\_010596  
 Red=Cloning site Green=Tags(s)

MLFLPADTGHTGVAAAASGPHVRSPPVARAVRAMEPRPPPCGCCERLVLNVAGLRFETRARTLGRFPDTL  
 LGDPVRRSRFYD GARREYFFDRHRPSF DAVLYYYQSGGRLRRPAHVPLDVFL EEVSYFYL GAAALARLRE  
 DEGC AVPPERPLRRRAFARQLWLLFEFP ESSQAARVLAVVSVLVILVSI VVFCLETLPDFRDRDDPGLA  
 PVAAATGPFLARLNGSSPMPGAPPRQPFNDPFFVETL CWF SFELLVRLVACPSKAVFFKNVMNLIDF  
 VAILPYFVALGTELARQRGVGQPAMSLAILRVIRLVRVFRIFKLSRHSKGLQILGQTLRASMRELGLLIF  
 FLFIGVVL FSSAVYFAEVD RVDTHFTSIPESFWWAVVTMTTVGYGDMAPVTVGGKIVGSLCAIAGVLTIS  
 LPVPVIVSNFSYFYHRETEGEEAGMYSHVDTQPCGTLE GKANGGLVDSEVPELLPPLWPPAGKHMVTEV

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9016\\_f08.zip](https://cdn.origene.com/chromatograms/mm9016_f08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_010596

**ORF Size:** 1467 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\\_010596.2](#), [NP\\_034726.2](#)
**RefSeq Size:** 3494 bp

**RefSeq ORF:** 1470 bp

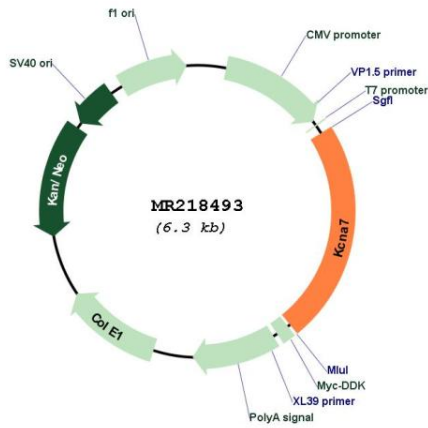
**Locus ID:** 16495

**UniProt ID:** [Q17ST2](#)
**Cytogenetics:** 7 29.3 cM

**MW:** 54.4 kDa

**Gene Summary:** 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. Channels formed by isoform 1 inactivate faster than channels formed by isoform 2.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR218493