

Product datasheet for **SC122128**

KCNA1 (NM_000217) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNA1 (NM_000217) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNA1
Synonyms:	AEMK; EA1; HBK1; HUK1; KV1.1; MBK1; MK1; RBK1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>SC122128 representing NM_000217. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
ATGACGGTGATGTCTGGGGAGAAGCTGGACGAGGCTTCGGCCGCCCGGGCCACCCAGGATGGCAGC
TACCCCGGCAGGCCGACCACGACGACGACGAGTGTGCGAGCGCGTGGTATCAACATCTCCGGGCTG
CGCTTCGAGACGCGAGCTCAAGACCCTGGCGCAGTTCGCCAACACGCTGCTGGCAACCTAAGAAACGC
ATGCGCTACTTCGACCCCTGAGGAACGAGTACTTCTTCGACCGCAACCGGCCAGCTTCGACGCCATC
CTCTACTACTACCAGTCCGGCGGCCGCTGCGGAGGCCGTCACGTCGCCCTGGACATGTTCTCCGAG
GAGATCAAGTTTTACGAGTTGGGCGAGGAGCCATGGAGAAGTCCGGGAGGACGAGGGCTTCATCAAG
GAGGAGGAGCGCCCTCTGCCGAGAAGGAGTACCAGCGCCAGGTGTGGCTGCTCTTCGAGTACCCCGAG
AGCTCGGGGCCCGCCAGGGTCATCGCCATCGTCTCCGTCATGGTCATCCTCATCTCCATCGTCATCTTT
TGCTCGGAGACGCTCCCGAGCTGAAGGATGACAAGGACTTCACGGGCACCGTCCACCGCATCGACAAC
ACCACGGTCATCTACAATTCACACATCTTCACAGACCCCTTCTTCATCGTGGAAACGCTGTGCATCATC
TGGTTCTCCTTCGAGCTGGTGGTGCCTTCTTCGCTGCCCGAGCAAGACGGACTTCTTCAAAAACATC
ATGAACCTCATAGACATTGTGGCCATCATTCTTATTTATCACCCCTGGGCACCGAGATAGCTGAGCAG
GAAGGAAACCAGAAGGGCGAGCAGGCCACCTCCCTGGCCATCCTCAGGGTCATCCGCTTGGTAAGGGTT
TTTAGAATCTTCAAGCTCTCCGCCACTTAAGGGCTCCAGATCCTGGGCCAGACCCTCAAAGCTAGT
ATGAGAGAGCTAGGGCTGCTCATCTTTTCTCTTCATCGGGTCATCCTGTTTTCTAGTGCAGTGTAC
TTTGCCGAGGCGGAAGAAGCTGAGTCGCACCTTCCAGTATCCCGATGCTTTCTGGTGGGCGGTGGTG
TCCATGACCACTGTAGGATACGGTGACATGTACCCTGTGACAATTGGAGGCAAGATCGTGGGCTCCTTG
TGTGCCATCGCTGGTGTGCTAACAATTGCCCTGCCCGTACCTGTATTGTGTCCAATTTCAACTATTTTC
TACCACCGAGAACTGAGGGGGAAGAGCAGGCTCAGTTGCTCCACGTCAGTTCCCCCTAAGCTTAGCCTCT
GACAGTGACCTCAGTCGCCGAGTTCTCTACTATGAGCAAGTCTGAGTACATGGAGATCGAAGAGGAT
ATGAATAATAGCATAGCCATTATAGACAGGTCATATCAGAAGTCCAATTGCACCACAGCTAACCAA
AACTGCGTTAATAAGAGCAAGCTACTGACCAAAGGGCGA
```



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_000217 unedited GTTTTCATTTGTATACGACTCCTATAGGCGGCACGCGATTGCCCCCTATGACGGTGATGT CTGGGGAGAACGTGGACGAGGCTTCGGCCGCCCGGGCCACCCCCAGGATGGCAGTACC CCCGGCAGGCCGACCACGACGACCACGAGTGCTGCGAGCGGTGGTGATCAACATCTCCG GGCTGCGCTTCGAGACGACGCTCAAGACCCTGGCGCAGTCCCAACACGCTGCTGGGCA ACCCTAAGAAAACGCATGCGCTACTTCGACCCCTGAGGAACGAGTACTTCTTCGACNCGC AACCGGCCAGCTTCGACGCCATCCTCTACTACTACCAGTCCGGCGGCCGCTGCGGAGG CCGGTCAACGTGCCCTGGACATGTTCTCCGAGGAGATCAAGTTTTACGAGTTGGGCGAG GAGGCCATGGAGAAGTTCGGGGAGGACGAGGGTTCATCAAGGAGGAGGAGCGCCCTCTG CCCGAGAAGGAGTACCAGCGCCAGGTGTGGCTGCTCTTCGAGTACCCCGAGAGCTCGGGG CCCGCCAGGGTCATCGCCATCGTCTCCGTATGGTCATCCTCATCTCCATCGTCATCTTT TGCCTGGAGACGCTCCCGAGCTGAAGGATGACAAGGACTTCACGGGCACCGTCCACCGC ATCGACAACACCAGGTCATCTACAATTCCAACATCTTCACAGACCCCTTCTTCATCGTG GAAACGCTGTGCATCATCTGGTTCTCCTTCGAGCTGGTGGTGCCTTCTTCGCTGCCCC AGCAGACAGACTTCTTCAAACATCATGAACCTCATAGACATTGTGGCCATCATTCTTA TTTTCATACCCCTGGGCACCGAGATAGCTGAGCAGGAAGGAAACCAGATGGCGAGCAGGCC ACTNCCTGCCATCCTCAGNNTCATCGCTGGTAAGGNCTTTTAAA
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_000217
Insert Size:	1488 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_000217.1
RefSeq Size:	1488 bp
RefSeq ORF:	1488 bp
Locus ID:	3736
UniProt ID:	Q09470
Cytogenetics:	12p13.32
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	56.6 kDa

Gene Summary:

This gene encodes a voltage-gated delayed potassium channel that is phylogenetically related to the *Drosophila* Shaker channel. The encoded protein has six putative transmembrane segments (S1-S6), and the loop between S5 and S6 forms the pore and contains the conserved selectivity filter motif (GYGD). The functional channel is a homotetramer. The N-terminus of the channel is associated with beta subunits that can modify the inactivation properties of the channel as well as affect expression levels. The C-terminus of the channel is complexed to a PDZ domain protein that is responsible for channel targeting. Mutations in this gene have been associated with myokymia with periodic ataxia (AEMK). [provided by RefSeq, Jul 2008]