

## Product datasheet for **SC331540**

### **Kv1.2 (KCNA2) (NM\_001204269) Human Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Kv1.2 (KCNA2) (NM\_001204269) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Kv1.2  
**Synonyms:** DEE32; EIEE32; HBK5; HK4; HUKIV; KV1.2; MK2; NGK1; RBK2  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC331540 representing NM\_001204269.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGACAGTGGCCACCGAGACCCAGCAGACGAGGCTGCTGCCCTCCCTGGGCACCCACAGGACACCTAT
GACCCAGAGGCAGACCACGAGTGTGTGAGAGGGTGGTGATCAACATCTCAGGGCTGCGTTTGAGACC
CAGCTAAAGACCTTAGCCAGTTTCCAGAGACCCCTTAGGGGACCCAAAGAAACGAATGAGGTACTTT
GACCCCTCCGAAATGAGTACTTTTTCGATCGGAACCGCCCTAGCTTTGATGCCATTTGTACTACTAC
CAGTCAGGGGGCCGATTGAGGCGACCTGTGAATGTGCCCTTAGATATATTCTCTGAAGAAATTCGGTTT
TATGAGCTGGGAGAAGAAGCGATGGAGATGTTTCGGGAAGATGAAGGCTACATCAAGGAGGAAGAGCGT
CCTCTGCCTGAAAATGAGTTTCAGAGACAAGTGTGGCTTCTCTTTGAATACCCAGAGAGCTCAGGGCCT
GCCAGGATTATAGCTATTGTGTCTGTCTGTTGATTCTGATCTCAATTGTCAGCTTCTGTCTGAAACA
TTGCCATCTCCGGGATGAGAATGAAGACATGCATGGTAGTGGGGTGACCTTCCACACCTATTCCAAC
AGCACCATCGGGTACCAGCAGTCCACTTCTTCCAGACCCCTTCTTCAATGTAGAGACTCTGCATC
ATCTGGTTCTCCTTTGAATTCTTGGTGAGGTTCTTTGCCGTGCCAGCAAAGCCGGCTTCTTCCCAAC
ATCATGAACATCATTGACATTGTGGCCATCATCCCTACTTCATCACCCCTGGGGACAGAGTTGGCTGAG
AAGCCAGAGGACGCTCAGCAAGGCCAGCAGGCCATGTCACTGGCCATCCTCCGTGTCATCCGGTTGGAA
CGCAGACCTCTGCAAAGCCAGAAGAGTAAGCGGGGAAGGCAGCATCTGAACACCTCACATGACTGCACC
TTAGGAATTAACCTAGTCGCGGGCATGACTGTACAGTGGACCAGGCATCTGGTCCTGATGACAGGCAG
ACACCAGCTGTAACCTACATTGCACAGGATGTATTGA
  
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001204269  
**Insert Size:** 1071 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).



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<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001204269.1</a>
<b>RefSeq Size:</b>	2022 bp
<b>RefSeq ORF:</b>	1071 bp
<b>Locus ID:</b>	3737
<b>UniProt ID:</b>	<a href="#">P16389</a>
<b>Cytogenetics:</b>	1p13.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Potassium, Transmembrane
<b>MW:</b>	41 kDa
<b>Gene Summary:</b>	<p>Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. The coding region of this gene is intronless, and the gene is clustered with genes KCNA3 and KCNA10 on chromosome 1. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) has multiple differences, compared to variant 1. These differences result in distinct 5' and 3' ends and cause translation termination at a downstream stop codon, compared to variant 1. The encoded protein (isoform b) is shorter than isoform a.</p>