

Product datasheet for **SC109907**

Kv beta 1 (KCNAB1) (NM_172159) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kv beta 1 (KCNAB1) (NM_172159) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNAB1
Synonyms:	AKR6A3; hKvb3; hKvBeta3; KCNA1B; KV-BETA-1; Kvb1.3
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene ORF within SC109907 sequence for NM_172159 edited (data generated by NextGen Sequencing)

```
ATGCAAGTCTCCATAGCCTGCACAGAGCACAATTTGAAGAGTCGGAAATGGTGAGGACCGA
CTTCTGAGCAAGCAGAGCTCCACCGCCCCCAATGTGGTGAACGCAGCCCGGCCAAATTC
CGCACGGTCGCTATCATCGCGCGCAGCCTGGGGACGTTTCACGCCTCAGCATCACATTTCT
CTCAAAGAGTCCACCGCAAAGCAGACTGGCATGAAATATAGGAATCTTGGAAAATCAGGA
CTCAGAGTTTCTTGCTTGGGTCTTGAACATGGGTGACATTTGGAGGTCAAATTTTCAGAT
GAGGTTGTGAACGGCTGATGACCATCGCCTATGAAAGTGGTGTAAACCTCTTTGATACT
GCCGAAGTCTATGCTGCTGGAAAGGCTGAAGTGATTCTGGGGAGCATCATCAAGAAGAAA
GGCTGGAGGAGGTCCAGTCTGGTCATAACAACCAAACTCTACTGGGGTGGAAAAGCTGAA
ACAGAAAGAGGGCTGTCAAGAAAGCATATTATTGAAGGATTGAAGGGCTCCCTCCAGAGG
CTGCAGCTCGAGTATGTGGATGTGGTCTTTGCAAATCGACCGGACAGTAACACTCCCATG
GAAGAAATGTCCGAGCCATGACACATGTGATAAACCAAGGCATGGCGATGTAAGTGGGC
ACCTCGAGATGGAGTGCTATGGAGATCATGGAAGCCTATTCTGTAGCAAGACAGTTCAAT
ATGATCCCACCGTCTGTGAACAAGCTGAGTACCATCTTTCCAGAGAGAGAAAAGTGGAG
GTCCAGCTGCCAGAGCTTACCACAAAATAGGTGTTGGCGCAATGACATGGTCTCCAATT
GCCTGTGGAATCATCTCAGGAAAATACGGAACCGGGTGCCTGAAAGTTCCAGGGCTTCA
CTGAAGTGCTACCAGTGGTTGAAAGAAAGATTGTAAGTGAAGAAGGGAGAAAACAGCAA
AACAAAGCTAAAAGACCTTTCCCCAATTGCGGAGCGTCTGGGATGCACACTACCTCAGCTA
GCTGTTGCGTGGTGCCTGAGAAATGAAGGTGTGAGTTCTGTGCTCCTGGGATCATCCACT
CCTGAACAACCTATTGAAAACCTTGGTGCCATTGAGTTCTCCCAAAGATGACATCACAT
GTGGTAAATGAGATTGATAACATACTGCGCAACAAGCCCTACAGCAAGAAGGACTATAGA
TCATAA
```

Clone variation with respect to NM_172159.3



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_172159 unedited GATTTTGTAAATCCGACTTACTATAGGGCGGCCGGAATTCGGCACGAGGGGAGCAAGGAG GGCTTAAAAGAAAAGCGGAAATCCCCGCAACTGCTCAACCTCTCGTGACTGCCTGTGTTC TGGGGTCTGAGAGGGACCGTGCCTGCTGGGGAAGCAATGCAAGTCTCCATAGCCTGC ACAGAGCACAATTTGAAGAGTCCGAATGGTGAGGACCGACTTCTGAGCAAGCAGAGCTCC ACCGCCCCAATGTGGTGAACGCAGCCCGGGCCAAATTCGCACGGTTCGCTATCATCGCG CGCAGCTGGGGACGTTACGCCTCAGCATCACATTTCTCTCAAAGAGTCCACCGCAAAG CAGACTGGCATGAAATATAGGAATCTTGGAAAATCAGGACTCAGAGTTTCTTGCTGGGT CTTGGAACATGGGTGACATTTGGAGTCAAATTCAGATGAGGTTGCTGAACGGCTGATG ACCATCGCTATGAAAGTGGTGTAACTCTTTGATACTGCCAAGTCTATGCTGCTGGA AAGGCTGAAGTATTCTGGGGAGCATCATCAAGAAGAAAGGCTGGAGGAGTCCAGTCTG GTCATAACAACCAAACTCTACTGGGGTGGAAAAGCTGAAACAGACAGAGGGCTGTCAAGA AAGCATATTATTGAAGGATTGAAGGGCTCCCTCCAGAGTGCAGCTCGAGTATGTGGAT GTGGTCTGTGCAATCGACCTGACAGTAACTCCCATGGAAGAAATGTCGAGCCATGA CACATGTGATAAACCTAAGCATGGCGATGACTGAGGCACCCTCAGATGCAGTGTATGG AGATCATGGCAGCTATTCTGTAGCAGACAGCTCATATGATCCCACGGTCTGTGAACAGC TGAGTACATCTTTTCANAAGAGAAGAGGAGTCCAGCTGCCAGACTCTACACAAGTGT NGGCGCATGACTGTNCTCACTGCTGTGGACATCTCAGAAATCG
3' Read Nucleotide Sequence:	>OriGene 3' read for NM_172159 unedited TTGTTACATTATGNACGCGCCGCACTTANGATCGAGTTTTTTTTTTTTTTTTTTTTAAAA TTGAATGCACAAAATGCTTTTACTCTAAGCAAAAATAAATCAATCAAATCACATTTCC CATTAGACAGCACCTCAGCTCCTCTATACATACAGCAGTTCGCTGGATTGAATACACAAT GAACAACCTGAAAATGATCAATTTCCATCATTCTGATAACACGGGCAAAAAATCAAACCTC TCTGTTAGAATACAGTACTAGTAAATCAAAAAGAAAATTTCTTGATATCTCCACTAGCA TTTTCAGATTTAGAATTTAACCATGAAGTACATATCTAGAACTAATGACAGAAAATCGCA TTTTAAAATAATATTACAGTTCTTCTGTAAACCTCAGAGTGATTTCTGTGTGGGAACTT GCTGACCAGAAAATTAATGAGAATTTGTACATCCTCAGATAGCCAAATAGAGTTAAAG GGCCACTCCCACACCACCCCTTCAAAAAAAAAAAAAACATGTTTTCTCTTTTTACAGA TATTGACACAGTATAGTCTCACAATTTTCTCAAGTGGGATTAATGAGGGTAAGTAGC CAATAGTGGCAGGGCTAGATACACCTCAGATTTTCGAGTGAACAAGGGTAAGCCCATTA ATCCATGCAAGAAGCTTTCATGCATATAGTTTGTGATATAATATGATTATAGAACCAG AAGTCTTTCTTTAACATTTTGTCTTTTCACTAGGCAAGTAAATTTACCCAGCATATTCTG AATAGTGACATAGCATTTTTCAAAAAGCCAGTGGTTGACTTTTCATGTTAAACAATGCCCTC AAAATACCAACATTATATTATAAAAATCCAGTGCTAATTAACATGAACATTTGCCTTC C
Restriction Sites:	NotI-NotI
ACCN:	NM_172159
Insert Size:	3200 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).
RefSeq:	NM_172159.2 , NP_751891.1
RefSeq Size:	4094 bp
RefSeq ORF:	1206 bp
Locus ID:	7881

Protein Families: Druggable Genome, Ion Channels: Other

Gene Summary: 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 includes distinct isoforms which are encoded by alternatively spliced transcript variants of this gene. Some of these isoforms are beta subunits, which form heteromultimeric complexes with alpha subunits and modulate the activity of the pore-forming alpha subunits. [provided by RefSeq, Apr 2015]

Transcript Variant: This variant (3) has an alternate 5' sequence including the 5' UTR and the 5' coding region, as compared to variant 1. It encodes isoform 3, also known as kvb1.3, which has a shorter and distinct N-terminus than isoform 1.