

Product datasheet for **MC226865**

Kcnab1 (NM_001289450) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kcnab1 (NM_001289450) Mouse Untagged Clone
Tag: Tag Free
Symbol: Kcnab1
Synonyms: Akr8a8; Kvbeta1.1; mKv(beta)1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC226865 representing NM_001289450
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACAATTGCCTACGAAAGTGGAGTTAATCTCTTCGACACAGCTGAGGTCTATGCTGCTGGGAAGGCTG
 AGGTGATTCTGGGAAGCATCATCAAGAAGAAAGGCTGGAGGAGTCCAGCTTGGTCATCACAAACAACT
 CTACTGGGGTGGAAAAGCTGAGACAGAAAGGGGACTGTCAAGAAAGCACATCATTGAAGGACTGAAAGGC
 TCCTCCAGAGGCTGCAACTGGAATACGTGGATGTGGTCTTTGCAAATCGCCAGACAGCAACACTCCCA
 TGGAAGAAATCGTTCGAGCCATGACGCACGTGATCAACCAAGGCATGGCCATGACTGGGGCACCTCGAG
 GTGGAGCGCGATGGAGATCATGGAAGCCTACTCTGTGCGCACGGCAGTTCAACATGATCCCGCCTGTCTGT
 GAGCAAGCTGAGTACCATCTTTCCAGAGAGAGAAGGTGGAGGTCCAGCTGCCGGAGCTCTACCATAAAA
 TAGGAGTTGGTGCAATGACATGGTCTCCACTTGCTTGGAATTATTTTCAGGAAAATATGGAAATGGGGT
 GCCAGAAAGTTCTAGAGCTTCACTGAAGTGCTACCAAGTGGTTGAAGGAAAGAATCGTAAGTGAAGAAGGG
 AGAAAACAGCAAAACAAGCTGAAAGACCTCTCTCAATCGCTGAGCGCCTGGGGTGCACGCTACCTCAGC
 TGGCTGTGGCGTGGTGCCTGAGAAATGAGGGTGTGAGTTCTGTGCTCCTGGGATCATCCACTCCGGAACA
 ACTCATTGAAAACCTTGGTGCCATTGAGTCTCCCTAAGATGACATCTCACGTGGTGAACGAGATTGAT
 AACATACTGCGCAACAAGCCCTACAGCAAAAAGGACTATAGATCA**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001289450
Insert Size: 888 bp



[View online »](#)

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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<u>NM_001289450.1</u> , <u>NP_001276379.1</u>
RefSeq Size:	2851 bp
RefSeq ORF:	888 bp
Locus ID:	16497
Cytogenetics:	3 30.15 cM
Gene Summary:	<p>Cytoplasmic potassium channel subunit that modulates the characteristics of the channel-forming alpha-subunits (PubMed:10454353). Modulates action potentials via its effect on the pore-forming alpha subunits (PubMed:10454353). Promotes expression of the pore-forming alpha subunits at the cell membrane, and thereby increases channel activity (PubMed:8824288). Mediates closure of delayed rectifier potassium channels by physically obstructing the pore via its N-terminal domain and increases the speed of channel closure for other family members (By similarity). Promotes the closure of KCNA1, KCNA2 and KCNA5 channels (By similarity). Accelerates KCNA4 channel closure (By similarity). Accelerates the closure of heteromeric channels formed by KCNA1 and KCNA4 (By similarity). Accelerates the closure of heteromeric channels formed by KCNA2, KCNA5 and KCNA6 (By similarity). Enhances KCNB1 and KCNB2 channel activity (PubMed:8824288). Binds NADPH; this is required for efficient down-regulation of potassium channel activity (By similarity). Has NADPH-dependent aldoketoreductase activity (By similarity). Oxidation of the bound NADPH strongly decreases N-type inactivation of potassium channel activity (By similarity).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.</p>