

Product datasheet for **MG220056**

Kcnd1 (NM_008423) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnd1 (NM_008423) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnd1
Synonyms:	1110037K09Rik; Kca2-; Kca2-1; Kv4.; Kv4.1; mSh; mShal1; S; Shal; Shal1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG220056 representing NM_008423
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCAGGTGTGCCACATGGCTACCATTTGCAAGGGCCGACGAGTGGCTGGCTGCCCTTAGCCC
 AGCAGCCCTACCCCTGCACCGAGGTGAAGGCATCCGAGGGGATGAGTTCTGGTGGTGAATGTGAG
 TGGTCGGCGCTTTGAGACCTGAAAAACACACTGGATCGTACCCAGACACATTGCTGGGACGCTCGGAG
 AAGGAATCTTCTATGATGCTGAATCTGGCAGTACTTCTTTGATCGTGACCCAGACATGTTCCGGCAGC
 TGCTGAACTTTTATCGCACTGGCCGGCTGCACTGCCCCAGGCAGGAGTGCATCCAGGCCTTTGATGAGGA
 GCTGGCCTTCTATGGCTTGGTCCAGAGCTGGTTGGTACTGCTGTCTTGAAGAGTACAGGGACCGTAAG
 AAGGAAAACGCAGAGCGCTGGCAGAAGATGAGGAGGCTGAGCAGGCCGGGAAGGTCCAGCCCTCCAG
 CAGGCAGCTCCCTGCGACAGCGACTCTGGAGGGCCTTTGAGAACCCACACGAGCACTGCAGCCCTGGT
 TTTCTACTATGTACTGGCTTCTCATAGCTGTGTGAGTATTGCCAACGTCGTGGAGACCATCCCATGT
 CGTGGTACCCACGATGGCCCTCAAAGAGCAGTCGTGTGGTGACCGCTTCCCTACAGCCTTTTTCTGTA
 TGGACACAGCCTGTACTCATATTCACAGGGGAGTACCTGCTGCGGCTCTTCGACGCCCCAGCCGTTG
 TCGCTTCTCGGAGTGTGATGAGCCTTATCGATGTGGTGGCCATCCTACCCTACTATATTGGGCTGTT
 GTGCCAAGAATGATGATGTCTCTGGTGCCTTTGTACCCTCCGTGTGTTCCGGGTCTTCCGAATCTTCA
 AGTTCTCCAGGCACTCGCAGGGCCTGAGGATTCTGGGTACACCCCTCAAGAGCTGTGCCTCTGAGCTAGG
 CTTTCTCCTCTTTCCCTCACCATGGCCATCATCATCTTGGCACTGTGATGTTCTATGCTGAGAAGGGC
 ACGAGCAAGACCAACTTCAAGCATCCCTGCTGCCTTCTGGTATACCATTGTACCATTGACCACTTG
 GGTATGGAGATATGGTACCTAGCACCATTCAGGCAGCAAAATTTTGGGTCCATCTGCTCACTACGGGTG
 CTTGGTCAATGCCTTGCCTGTGCCAGTATTGTATCCAACCTTCAGCCGCATCTACCACCAGAACCAGCGT
 GCTGACAAGCGCCGGCACAGCAGAAAGTGCAGCTGGCAAGAATCCGTTTGGCAAAGAGTGTACCACCA
 ATGCCTTCTGCAGTATAAGCAAATGGGGCCTCGAGGACAGTGGCAGTGGCGACGACAAATGCTGTG
 CGTTAGGAGCCGCTCTGCTTTTGAACAACAGCATCACCATCTGCTGCATTGTCTGGAGAAGACTACGTGT
 CACGAGTTCACAGACGAGCTAATTTTCACTGAGGCCCTGGAGCAGTCTCACTGGGTGGTGCACCAGCC
 GCAGTACCTCAGTATCATCCAACCAATGGGGCCTGGGAGCCTGTTCTCATCCTGCTGCTCTCGAAGGT
 CAATCGCAGAGCCATCCGCTTGGCAACTCTACTGCCTGTGAGCCGTGGCAGCATGCAGGAGCTAGAC
 AACTAGCAGGTCTTCGAGGAGCCCTGCCCTCAAACCCGCTCAAGCCTCAATGCCAAGCCCCACGACA
 GCCTTGACCTGAACTGTGACAGCCGGGACTTCGTGGCCGCATCATCAGTATCCCAACCCCTGCCAA
 CACGCCAGATGAAAGTCAACCTTCTCCCTAGTGGTGGTGGCGCAGTGGTGGCACACCCAACACCACT
 CTCAGGAATCCAGCTTGGGTAATCCGTGCCTCCTCCCTGAGACTGTCAAGATCTCTTCCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG220056 representing NM_008423
 Red=Cloning site Green=Tags(s)

MAAGVATWLPFARAAAVGWLPLAQQLPPAPEVKASRGDEVLVVNVSGRRFETWKNTLDRYPDTLLGSSE
 KEFFFYDAESGEYFFDRDPDMFRHVLNFYRTGRLHCPRQECIQAFDEELAFYGLVPELVGDCCLLEEYRDRK
 KENAERLAEDEEAEQAGEPALPAGSSLRQLWRAFENPHTSTAALVFYVYVTFGFIASVIANVVETIPC
 RGTFRWPSKEQSCGDRFPTAFFCMDTACVLIFTGEYLLRLFAAPSRFRFLRSVMSLIDVVAIIPYYIGLF
 VPKNDDVSGAFVTLRVFRVFRIFKFSRHSQGLRILGYTLKSCASELGFLFLSLTMAIIIFATVMFYAEKG
 TSKTNFTSIPAAFYITVMTTLGYGDMVPSTIAGKIFGSICSLSGVLVIALPVPVIVSNFSRIYHQNR
 ADKRRRAQKQVRLARIRLAKSGTTNAFLQYKQNGLEDGSGDGMQLCVRSRSAFEQHHLLHLCLEKTTT
 HEFTDELTFSEALGAVSLGGRTSRSTSIVSSQPMGPGSLFSSCCSRRVNRRAIRLANSTASVSRGSMQELD
 TLAGLRRSPAPQTRSSLNAKPHDSLNLNCDSDRFVAAIISIPTPPANTPDESQSPSSPGGGGSGGTPNNT
 LRNSSLGTPCLLPETVKISSL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



```

          Kozac
          Consensus
          Sgf I   Asc I
EcoR I   BamH I Kpn I   RBS
CTATAGGCGCGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG   ACG CGT   ACG CGG   CCG CTC GAG   ATG GAG AGC GAC ---
                                     T   R   T   R   P   L   E   M   E   S   D   -   -   -

Pme I   Fse I
--- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
- - - E E R V Stop
    
```

ACCN: NM_008423

ORF Size: 1953 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_008423.2](#), [NP_032449.1](#)

RefSeq Size: 1956 bp

RefSeq ORF: 1956 bp

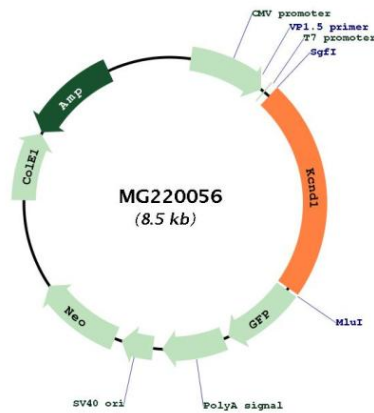
Locus ID: 16506

UniProt ID: [Q03719](#)

Cytogenetics: X 3.53 cM

Gene Summary: This gene encodes a multipass transmembrane protein that comprises a subunit of voltage-gated rapidly inactivating A-type potassium channels. [provided by RefSeq, May 2015]

Product images:



Circular map for MG220056