

Product datasheet for **MG221253**

Kcna10 (NM_001081140) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Kcna10 (NM_001081140) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Kcna10 |
| Synonyms: | Gm1962; Kcna8; Kv1.8 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>MG221253 representing NM_001081140
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGTGTGTAGCTGGAAGAATGGAGGTTGCTCTGGTCAATTTTGATAACTCGGATGAAATCCATG
 AAGAGCCAGGCTATGCCACAGACTTTGACCCAACCAGCTCAAAGGCCGCCCTGGTAGCAGTCCCTTTTC
 CAATTGGAGAGTCCATTATCAGTGACAACACCAACCATGAAACTGCCTTCTCCAAGATCCCAGGAGATGAT
 GTGGATCCCCGGGACCTGAGCCAGTGGTCTTGAATGAGGGAAACCAAAGGGTATCATCAACATTGCTG
 GTCTGAGATTCGAGACTCAGCTCAGAACACTTAATCAATCCCAGAGACTCCTGGGAGACCGGGAGAA
 AAGGATGCAATTTTTTGGACTCCATGAGAAATGAGTATTTCTTTGATAGAAAACAGACCTAGTTTTGATGGA
 ATCTTATATTATTACCAGTCTGGTGGGAAAATACGGCGGCCAGCCAACGTGCCTATCGATGTTTTCGCTG
 ATGAGATCTCCTTCTATGAACTGGTAGCGAGGCCATGGACCAGTTCGGGAGGATGAAGGCTTCATTAA
 GGACCCTGAGACTGCTGCCACCAATGACTTTCACCGCAATTCTGGCTTCTTTTGTAGTACCCCGAG
 AGCTCCAGTGCAGCTCGAGGAGTGGCTGTGGTCTCGGTTTTGGTTGATGTCATCTCCATCACCATCTTCT
 GCCTGGAGACTCCCAGAGTCCGAGAGGACAGGGAGCTGAAGGTGGTACAGACCCCCAGCATCAATAC
 AAACAAAACAGGCCTCTCCCAGACCATGTTCACTGATCCTTTCTTCATGGTGGAGTCCACCTGCATCGTG
 TGGTTCACCTTTGAGCTGGTGTCCGGTTTGTGGTCTGCCCCAGCAAGACTGACTTCTTCAAGAACATCA
 TGAATATTATTGACATCATCTCCATCATCCCCTACTTTGCAACCCCTATAACAGAGCTAGTACAGGAGAC
 CGAGCCAAAGTGCCAGCAGAACATGTCCCTGGCCATCTGAGGATCATTCGTCTGGTGGAGGCTTCCCGC
 ATCTTCAAGCTTTCTCGACACTCTAAAGGGCTGCAGATCTGGGGCAGACGCTGAAGGCTTCCATTTGCTGA
 AGCTGGGGCTGCTCATCTTCTTCTTTCATTGGGGTCACTCTTTCTCCAGTGCAGTCACTTTTGTGTA
 GGTGGATGAGCCAGAGTCCCATTCTCTAGCATTCTGATGGCTTCTGGTGGGCTGTGGTACCATGACA
 ACTGTAGGCTACGGTGACATGTGCCAACCCACCCAGGAGGAAAGATTGTGGTACTCTGTGCGCCATTG
 CTGGTGTCTCACCATCGCCCTCCCTGTGCCTGTCTCATTGTCTCCAATTTCAACTACTTCTACCACCGTGA
 GACTGAGAACGAGGAGAAGCCAAACATCCAGGAGAAGTGCACAAAATCTCAACAGCATGGGCTCCAGA
 ATGGGGAGTACTGAGTCTCTCAACAAGACCAATGGCAGTGTCTGCAGAAAAGTCCAGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG221253 representing NM_001081140
 Red=Cloning site Green=Tags(s)

MDVCSWKEMEVALVNFDSDEIHEEPGYATDFDPTSSKGRPGSSPFSNWRVLISDNTNHETAFAFKIPGEY
 VDPPGPEPVVLENGNQRVIINIAGLRFETQLRTLNQFPETLLGDREKRMQFFDSMRNEYFFDRNRPSFDG
 ILYYYQSGGKIRRPANVPIDVFADEISFYELGSEAMDQFREDEGF IKDPETLLPTNDFHRQFWLLFEYPE
 SSSAARGVAVVSVLVVVISITIFCLETLPEFREDRELKVVDRDPSINTNKTGLSQTMFTDPPFFMVESTCIV
 WFTFELVLRVVCPSKTDFFKNIMNIIDIIISIPYFATLITELVQETEPSAQQNMSLAILRIIRLVRVFR
 IFKLSRHSKGLQILGQTLKASMRELGLLIFFLFIGVILFSSAVYFAEVDEPESHFSSIPDGFVAVVTMT
 TVGYGDMCPTTPGGKIVGTLCAIAGVLTIALPVPVIVSNFNFYHRETENEEKPNIPGELDKILNSMGSR
 MGSTESLNKTNGSCSAEKSrk

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001081140

ORF Size: 1533 bp

OTI Disclaimer: 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_001081140.1](#), [NP_001074609.1](#)

RefSeq Size: 1826 bp

RefSeq ORF: 1536 bp

Locus ID: 242151

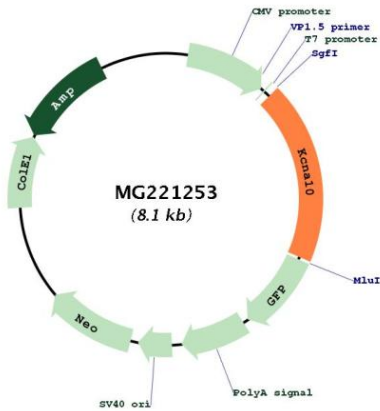
UniProt ID: [B2RQA1](#)

Cytogenetics: 3 46.64 cM

Gene Summary:

Mediates voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient. The channel activity is up-regulated by cAMP. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG221253