

Product datasheet for **RG225086**

KCNE1 (NM_001127668) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCNE1 (NM_001127668) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: KCNE1
Synonyms: ISK; JLNS; JLNS2; LQT2/5; LQT5; MinK
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG225086 representing NM_001127668
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCCTGTCTAACACCACAGCGGTGACGCCCTTCTGACCAAGCTGTGGCAGGAGACAGTTCAGCAGG
GTGGCAACATGTCGGCCTGGCCCGCAGGTCCCCCGCAGCAGTGACGGCAAGCTGGAGGCCCTCTACGT
CCTCATGGTACTGGGATTCTTCGGCTTCTCACCTGGGCATCATGCTGAGCTACATCCGCTCCAAGAAG
CTGGAGCACTCGAACGACCCATTCAACGTCTACATCGAGTCCGATGCCTGGCAAGAGAAGGACAAGGCCT
ATGTCCAGGCCCGGTCTGGAGAGCTACAGGTCGTGCTATGTCGTTGAAAACCATCTGGCCATAGAACA
ACCAACACACACCTTCTGAGACGAAGCCTTCCCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG225086 representing NM_001127668
Red=Cloning site Green=Tags(s)
MILSNTTAVTPFLTKLWQETVQQGNMSGLARRSPRSSDGKLEALYVLMVLGFFGFFTLGIMLSYIRSKK
LEHSNDPFNVYIESDAWQEKDKAYVQARVLESYRSCYVVENHLAIEQPNTLHPETKPSP

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

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_001127668.3](#)

RefSeq Size: 3199 bp

RefSeq ORF: 390 bp

Locus ID: 3753

UniProt ID: [P15382](#)

Cytogenetics: 21q22.12

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Gene Summary: The product of this gene belongs to the potassium channel KCNE family. Potassium ion channels are essential to many cellular functions and show a high degree of diversity, varying in their electrophysiologic and pharmacologic properties. This gene encodes a transmembrane protein known to associate with the product of the KVLQT1 gene to form the delayed rectifier potassium channel. Mutation in this gene are associated with both Jervell and Lange-Nielsen and Romano-Ward forms of long-QT syndrome. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008]