

Product datasheet for **SC331612**

KCNQ3 (NM_001204824) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ3 (NM_001204824) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNQ3
Synonyms:	BFNC2; EBN2; KV7.3
Vector:	pCMV6-Entry (PS100001)



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Fully Sequenced ORF: >SC331612 representing NM_001204824.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGAAGCCTGCAGAACACGCCACGATGTTCTGATTGTCCTGGGGTGCTTGATTCTGGCTGTCCTGACC
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CGACTGAAGTTTGCCAGGAAGCCCTGTGCATGTTGGACATCTTTGTGCTGATTGCCCTGTGCCCAGTG
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CGCATGCTGCGGATGGACCGGAGAGGTGGCACCTGGAAGCTTCTGGGCTCAGCCATCTGTGCCACAGC
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CTGGGGTCCGGGCTGGCCCTCAAGGTGCAGGAGCAACACCGT CAGAAGCACTTTGAGAAAAGGAGGAAG
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GCCGAGGGTGAGACGGACACAGACCGGACCCCTT CACGCCAGCGGCTCCATGCCTCTGTCTGCCACA
GGGGATGGGATTTCTGATT CAGTATGGACCCTTCCAATAAGCCCATTTAA
  
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Restriction Sites: Sgfl-Mlul

ACCN: NM_001204824

Insert Size: 2259 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).

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_001204824.1](#)

RefSeq Size: 10717 bp

RefSeq ORF: 2259 bp

Locus ID: 3786

UniProt ID: [O43525](#)

Cytogenetics: 8q24.22

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

MW: 84.8 kDa

Gene Summary: This gene encodes a protein that functions in the regulation of neuronal excitability. The encoded protein forms an M-channel by associating with the products of the related KCNQ2 or KCNQ5 genes, which both encode integral membrane proteins. M-channel currents are inhibited by M1 muscarinic acetylcholine receptors and are activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 2 (BFNC2), also known as epilepsy, benign neonatal type 2 (EBN2). Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2014]
Transcript Variant: This variant (2) contains an alternate 5' terminal exon and it thus differs in the 5' UTR and 5' coding region, compared to variant 1. The resulting isoform (2) has a distinct N-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.