

Product datasheet for RC220242L3V

OriGene Technologies, Inc.

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KCNQ4 (NM_004700) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: KCNQ4 (NM 004700) Human Tagged ORF Clone Lentiviral Particle

Symbol: KCNQ4

Synonyms: DFNA2; DFNA2A; KV7.4

Mammalian Cell

Selection:

Puromycin

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

ACCN: NM_004700 **ORF Size:** 2085 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC220242).

Sequence:

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.

RefSeg: NM 004700.2

 RefSeq Size:
 2335 bp

 RefSeq ORF:
 2088 bp

 Locus ID:
 9132

 UniProt ID:
 P56696

 Cytogenetics:
 1p34.2

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

MW: 76.9 kDa







Gene Summary:

The protein encoded by this gene forms a potassium channel that is thought to play a critical role in the regulation of neuronal excitability, particularly in sensory cells of the cochlea. The current generated by this channel is inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. The encoded protein can form a homomultimeric potassium channel or possibly a heteromultimeric channel in association with the protein encoded by the KCNQ3 gene. Defects in this gene are a cause of nonsyndromic sensorineural deafness type 2 (DFNA2), an autosomal dominant form of progressive hearing loss. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]