

## Product datasheet for **RC216897**

### **KCNH2 (NM\_172057) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCNH2 (NM_172057) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNH2
Synonyms:	ERG-1; ERG1; H-ERG; HERG; HERG1; Kv11.1; LQT2; SQT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC216897 representing NM\_172057  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

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 GTACAAGCTGCAGGCACCGCATCCACCCTGGACCATCCTGCATTACAGCCCTTCAAGGCCGTGTGG  
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 GAGGTGGTCAAGCACCAGCCGCTGCTCGCCGCTCCACTACTTCAAGGGCTGGTTCCTCATCGACATGGTGG  
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**Protein Sequence:** >RC216897 representing NM\_172057  
 Red=Cloning site Green=Tags(s)

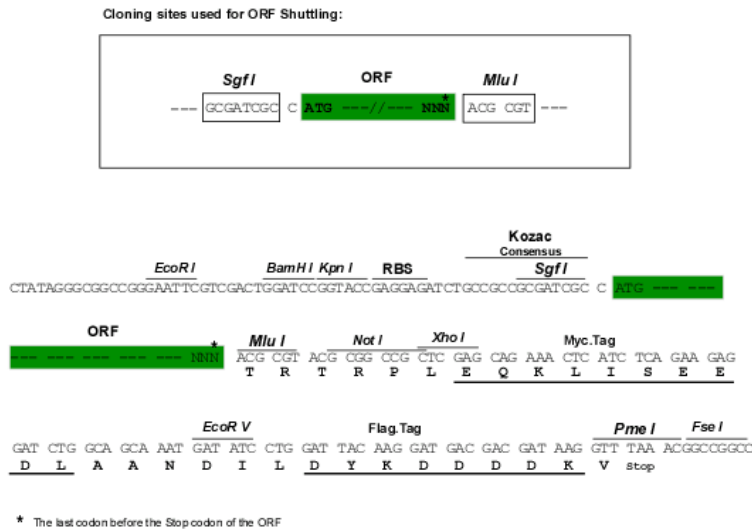
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1858\\_f08.zip](https://cdn.origene.com/chromatograms/ja1858_f08.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_172057

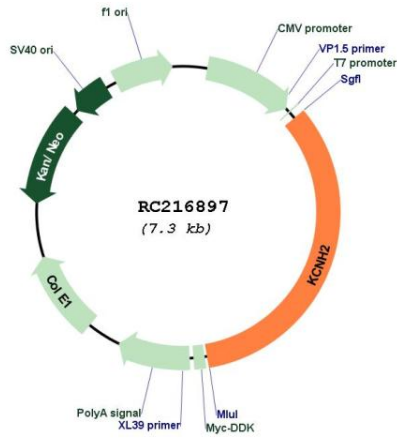
**ORF Size:** 2457 bp

**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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

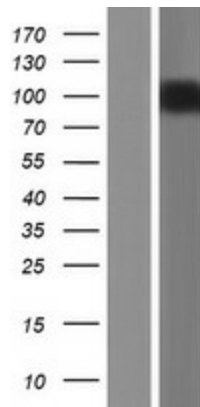
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_172057.2</a></u> , <u><a href="#">NP_742054.1</a></u>
<b>RefSeq Size:</b>	3212 bp
<b>RefSeq ORF:</b>	2460 bp
<b>Locus ID:</b>	3757
<b>UniProt ID:</b>	<u><a href="#">Q12809</a></u>
<b>Cytogenetics:</b>	7q36.1
<b>Domains:</b>	cNMP, ion_trans
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Potassium, Transcription Factors, Transmembrane
<b>MW:</b>	90.1 kDa
<b>Gene Summary:</b>	This gene encodes a voltage-activated potassium channel belonging to the eag family. It shares sequence similarity with the Drosophila ether-a-go-go (eag) gene. Mutations in this gene can cause long QT syndrome type 2 (LQT2). Transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC216897



Western blot validation of overexpression lysate (Cat# [LY406815]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216897 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).