

## Product datasheet for **RC222145**

### **KCNH6 (NM\_173092) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCNH6 (NM_173092) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNH6
Synonyms:	ERG-2; ERG2; hERG-2; HERG2; Kv11.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC222145 representing NM\_173092  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCCGGTCCGACAGGGGCCAGTCGCTCCCAAAACACTTACCTGGACACCATCATCCGCAAGTTCGAGG  
 GCCAAAGTCGGAAGTTCCTGATTGCCAATGCTCAGATGGAGAAGTGCGCCATCATTTACTGCAACGACGG  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC222145 representing NM\_173092  
Red=Cloning site Green=Tags(s)

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MPVRRGHVAPQNTYLDTIIRKFEQSRKFLIANAQMENCAIICYNDGFCELFGYSRVEVMQQPCTCDFLT
GPNTSSAVSRLAQALLGAECKVDILYYRKDASSFRCLVDVVPVKNEGDGAVIMFILNFEDLAQLLAKCS
SRLSQRLLSQSFLGSEGSHGRPGPGTGRGKYRTISQIPQFTLNFEVFNLEKHRSSSTTEIEIIAPH
KVVVERTQNVTEKVTQVLSLGADVLPEYKQLQAPRIHRWTLHYSYPFKAVWDWLILLVIYTAVFPTYSAAF
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VAAIPFDLLIFRTGSDETTTLIGLLKTARLLRLVRVARKLDRYSEYGA AVL FLLMCTFALIAHWLACICS
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HAPPGDTLVHLGDVLTLYFISRGSIEILRDDVVVAILGKNDIFGEPVSLHAQPGKSSADVRALTYCDLH
KIQRADLLEVLDMYPAFAESFWSKLEVTNLRDAAGGLHSPRQAPGSQDHQGF L SDNQSDAAPPLSIS
DASGLWPELLQEMPPRHSPQSPQEDPDCWPLKLSRLEQLQAQMNRLSRVSSDLSRILQLLQKMPQGH
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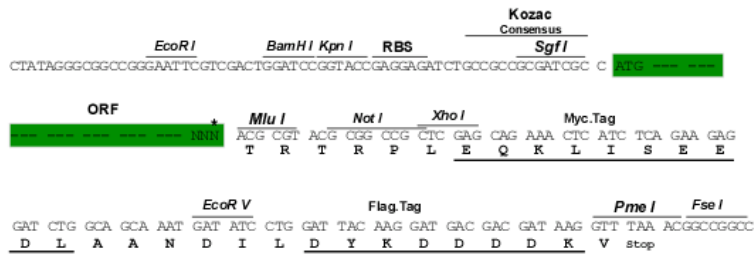
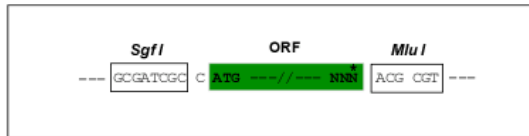
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6676\\_d05.zip](https://cdn.origene.com/chromatograms/mk6676_d05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

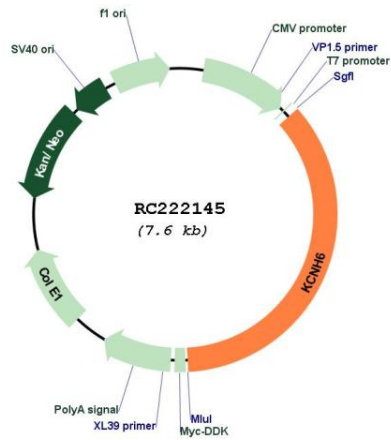


\* The last codon before the Stop codon of the ORF

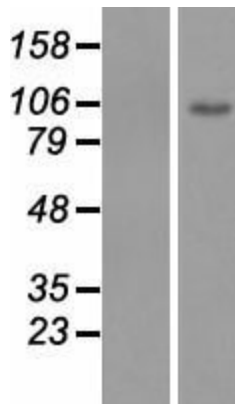
**ACCN:** NM\_173092

<b>ORF Size:</b>	2715 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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>	<a href="#">NM_173092.3</a>
<b>RefSeq Size:</b>	3017 bp
<b>RefSeq ORF:</b>	2718 bp
<b>Locus ID:</b>	81033
<b>UniProt ID:</b>	<a href="#">Q9H252</a>
<b>Cytogenetics:</b>	17q23.3
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Other, Transmembrane
<b>MW:</b>	100.3 kDa
<b>Gene Summary:</b>	Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, subfamily H. This member is a pore-forming (alpha) subunit. Alternative splicing results in multiple transcript variants that encode different isoforms. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC222145



Western blot validation of overexpression lysate (Cat# [LY406688]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222145 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).