

Product datasheet for **RG214036**

HCN2 (NM_001194) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HCN2 (NM_001194) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HCN2
Synonyms:	BCNG-2; BCNG2; HAC-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG214036 representing NM_001194
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGCGCGCGGGGGCGCGGGCCCGGGAGACCCGGGCGGACCCCGCGCGGGGCCGCGCC
 CGCCGCCCGCCCGCGCCCCCAACAGCAGCCGCCCGCGCGCCCGCCCGCCCGCCCGGGCCC
 CGGGCCCGCGCCCCAGCACCCCGGGCCGAGGCGTTGCCCGGAGCGCGGATGAGGGCGGC
 CCGCGGGGCCGGCTCCGACGCCGACAGCTCGTGCGGCCCGCCCGCACCCCGGGCGGGCAGCACGG
 CCAAGGGCAGCCGAACGGCGAGTGCGGGCGGGCAGCCGAGTGCAGCCCGGGGGCCGAGGGCCC
 GCGCGGGGGCCCAAGGTGTCGTTCTCGTGCCGCGGGGCGGCCTCGGGGCCCGCGCGGGGCCGGGCCC
 GCGGAGGAGGCGGGCAGCAGGAGGCGGGCCCGGGGGAGCCGCGGGCAGCCAGGCCAGCTTATGC
 AGCGCCAGTTCGGCGCGCTCTGCAGCCGGGCGTCAACAAGTTCTCGCTCGGGATGTTCCGACGCCAGAA
 GGCCGTGGAGCGGAGCAGGAGCGCGTCAAGTCCGGGGGCGCTGGATCATCCACCCGTACAGCGACTTC
 AGGTTCTACTGGACTTACCATGCTGCTGTTTCAAGTGGGAAACCTCATCATATCCAGTGGGATCA
 CCTTCTCAAGGATGAGACCACTGCCCCGTGGATCGTGTCAACGTGGTCTCGGACACCTTCTTCTCAT
 GGACCTGGTGTGAACCTCCGCACCGGCATTGTGATCGAGGACAACCGGAGATCATCTGGACCCCGAG
 AAGATCAAGAAGAAGTATCTGCGCACGTGGTTCGTGGTGGACTTCGTGTCTCCATCCCGTGGACTACA
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 GCTGGTGGCTCCATGCCGCTGTTCGCCAACGCCGACCCCAACTCGTACGGCCATGCTGACCAAGCTC
 AAGTTCGAGGTCTTCCAGCCGGTGACTACATCATCCGGAAGGCACCATCGGGAAGAAGATGTAATTCA
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 GCCAGCAGCTCCACACCGCGCTTGGGGCCACGCCGCTGCCCGGGCCCGCGCCAGCCCGGACCGCA
 GGGACTCGGCTCACCCGGCGCCCGGGCGCCTGGACCCCGAGACTCCGCGCGCTCGCGCTCTCGTC
 CAACTTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214036 representing NM_001194
 Red=Cloning site Green=Tags(s)

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MDARGGGGRPGESPGATPAGPPPPPPAPPQQQPPPPPPAPPGGPGAPPQHPRAEALPPEAADEGG
PRGRLRSRDSSCRPGTPGAASTAKGSPNGECGRGEPQCSPAGPEGPARGPKVSF SCRGAASGPAGPGP
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RFYWDF TMLLFMVG NLI IIPVGI TFFKDETTAPWIVFNVS DTFFLMDL VLNFR TGIVIEDNTEIILDPE
KIKKKYLRTWFVVDFVSSIPVDYIFLIVEK GIDSEVYKTARALRIVRFTKILSLLRLLRSLRIRYIHW
EEIFHMTYDLASAVMRICNLISMMLLLCHWDGCLQFLVPMLQDFPRNCWVVSINGMVNHSWSELYSFALFK
AMSHMLCIGYGRQAPESMTDIWL TMLSMIVGATCYAMF IGHATALIQSLDSSRRQYQEKYKQVEQYMSFH
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YSLSVDNFNEVLEEYPMRRRAFETVAIDRLDRIGKNSILLHKVQHDLNSGVFNQENAI IQEIVKYDRE
MVQQAELGQRVGLFPPPPPPQVTS AIATLQQA AAMSFCPQVARPLVGPLALGSPRLVRRPPPGPAAAA
SPGGPPASPPGAPASPRAPRTSPYGG LPAAPLAGPALPARRLSRASRPLSASQPSLPHGAPGPAATR
ASSSTPRLGPTPAARAAA PSPDRRDSASPGAAGGLDPQDSARSRLSSNL
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TRTRPLE - GFP Tag - V

Restriction Sites:

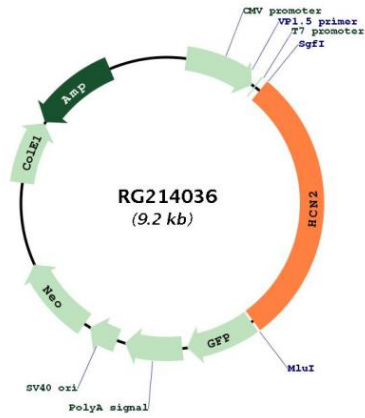
SgfI-MluI

Cloning Scheme:



ACCN:	NM_001194
ORF Size:	2667 bp
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.
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:	<ol style="list-style-type: none">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_001194.2 , NP_001185.2
RefSeq Size:	3459 bp
RefSeq ORF:	2670 bp
Locus ID:	610
UniProt ID:	Q9UL51
Cytogenetics:	19p13.3
Protein Families:	Druggable Genome, Ion Channels: Cyclic nucleotide gated, Transmembrane
Gene Summary:	The protein encoded by this gene is a hyperpolarization-activated cation channel involved in the generation of native pacemaker activity in the heart and in the brain. The encoded protein is activated by cAMP and can produce a fast, large current. Defects in this gene were noted as a possible cause of some forms of epilepsy. [provided by RefSeq, Jan 2017]

Product images:



Circular map for RG214036