

Product datasheet for **MR221659**

Hcn1 (NM_010408) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hcn1 (NM_010408) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hcn1
Synonyms:	Bcng1; C630013B14Rik; HAC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR221659 representing NM_010408
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGCGCGCGCAAACCCAACCTCCGCTCCAACAGCCGCGACGATGGCAACAGCGTCTTCCCCTCCA
 AGGCGCCCGCGACGGGGCCGGTGGCGGCCGACAAGCGCCTGGGGACCCCGCGGGGGCGGCGCGGCCGG
 GAAGGAACATGGCAACTCCGTGTGCTTCAAGGTGGACGGCGGCGGAGGAGAGAGCCGGCGGCAGCTTC
 GAGGATGCCGAGGGGCCCGCGGCAGTATGGTTTCATGCAGAGGCAGTTCACCTCCATGCTGCAGCCTG
 GGGTCAACAAATTCTCCCTCCGATGTTTGGGAGCCAGAAGGCGGTGGAGAAGGAGCAGGAAAGGTTAA
 AACTGCAGGCTTCTGGATTATCCATCCGTACAGTACTTCAGGTTTTATTGGGATTTAATCATGCTTATA
 ATGATGGTTGGAAATTTGGTCATCATACCAGTTGGAATCACGTTCTTACAGAGCAGACGACAACACCGT
 GGATTATTTTCAACGTGGCATCCGATACTGTTTCTGTTGGACTTAATCATGAATTTTAGGACTGGGAC
 TGTC AATGAAGACAGCTCGAAATCATCTGGACCCTAAAGTGATCAAGATGAATTTTAAAAAGCTGG
 TTTGTGGTGGACTTCATCTCATCGATCCCGGTGGATTATATCTTTCTCATTGTAGAGAAAGGGATGGACT
 CAGAAGTTTACAAGACAGCCAGAGCACTTCGTATCGTGAGGTTTACAAAAATTCTCAGTCTCTTGCGGTT
 ATTACGCCTTTCAAGTTAATCAGATACATACACCAGTGGGAAGAGATATTCCACATGACCTATGACCTC
 GCCAGTGTCTGGTGAGGATCTTCAACCTCATTGGCATGATGCTGCTTCTGTGCCACTGGGATGGCTGTC
 TTCAGTTCCTGGTTCCCTGCTGCAGGACTTCCCACCAGATTGCTGGGTTTCTCTGAATGAAATGGTTAA
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 GTCACGCAATGTTTGTGGCCATGCCACAGCTTTGATCCAGTCTTTGGACTCTTCAAGGAGCAGTATCA
 AGAGAAGTATAAGCAAGTAGAGCAATACATGTCATTCCACAAGTTACCAGCTGACATGCGCCAGAAGATA
 CATGATTACTATGAGCACCGATACCAAGCAAGATCTTCGATGAAGAAAATATTCTCAGTGAAGTAAATG
 ATCCTCTGAGAGAGGAAATAGTCAACTTCAACTGCCGAAACTGGTGGCAACTATGCCTCTTTTTGCTAA
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 ATCATTGAGAAGGAGCTGTGGGAAGAAAATGTATTTCCATCCAGCACGGTGTGCTGGCGTTATCACCA
 AGTCCAGTAAAGAAATGAAGCTGACAGATGGCTTACTTCGGAGAGATATGCCTGCTGACCAAGGGCCG
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 GCAAGAAAACTCTATTCTCCTGCAAGATTCCAGAAGGATCTAAACACTGGTGTTTTCAACAACAGGA
 GAACGAGATCCTGAAGCAGATCGTGAAGCATGACCGAGAGATGGTACAAGCTATCCCTCCAATCAACTAT
 CCTCAAATGACAGCCCTCAACTGCACATCTTCAACCACCACCCCAACCTCCCGCATGAGGACCCAATCTC
 CGCCAGTCTACACCGCAACCAGCCTGTCTCACAGCAATCTGCACTACCCAGTCCAGCACACAGACGCC
 CCAACCCTCAGCCATCCTTTCACCCTGCTCCTATACCACAGCAGTCTGCAGTCTCCTATACAGAGCCCC
 CTGGCCACACGAACCTTCCATTATGCCTCTCCCACTGCGTCCAGCTGTCACTCATGCAGCAGCCTCAGC
 AGCAACTACCGCAGTCCAGGTACAGCAGACTCAGACTCAGACTCAGCAGCAGCAGCAGCAGCAGCAGCAGC
 CAGCAGCAGCAGCAGCAACAGCAACAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
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 CCCTTCATAACCAACCTGACCAAGAAGTCAAGGCCCTTTCGCTCGCAGCCTTCTCTGCCCATGA
 GGTCTCCACTTTGATCTCCAGACCTCATCCCACTGTGGGCGAATCCCTGGCCTCTATCCCTCAACCCGTG
 GCAGCAGTCCACAGCACTGGCCTTCAGGACGGGAGCAGGAGCACAGTCCACAACGTGTACCTTGTTC
 GACAGATGTCCTCGGAGCCATCCCCCAACCGAGGAGTGCCTCCAGCACCCCTCCACCAGCAGTGT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR221659 representing NM_010408
 Red=Cloning site Green=Tags(s)

MEGGGKPNASNSRDDGNSVFPSKAPATGPVAADKRLGTPPGGGAAGKEHGNSVCFKVDGGGGGEEPAGSF
 EDAEGPRRQYGFMRQFTSMLQPGVKNFSLRMFGSQAVEKEQERVKTAGFWIIHPYSDFRFYWDLIMLI
 MMVGNLVIIPVGIITFFTEQTTTPWIIFNVASDTVFLDLIMNFRTGTVNEDSSEIILDPKVIKMNYLKSW
 FVVDFISSIPVDYIFLIVEKGMDESEVYKTARALRIVRFKILSLLRLLRSLRIRYIHQWEEIFHMTYDL
 ASAVVRIFNLIIGMMLLLCHWDGCLQFLVPLLQDFPPDCWVSLNEMVNSWKGQYSYALFKAMSHMLCIGY
 GAQAPVMSDLWITLSMIVGATCYAMFVGHATALIQSLDSSRRQYQEKYKQVEQYMSFHKLPADMRQKI
 HDYYEHRYQGKIFDEENILSELNDPLREEIVNFNCRKLVATMPLFANADPNFVTAML SKLRFVFPQGDY
 IIREGAVGKKMYFIQHGAVGVITKSSKEMKLDGSYFGEICLLTKGRRTASVRADTYCRLYSLVDNFNE
 VLEEYPMRRRAFETVAIDRLDRIGKNSILLQKFQKDLNTGVFNNQENEILKQIVKHDREMVQAIPPINY
 PQMTALNCTSTTPTSRMRTQSPVYATSLSHSNLHSPSPSTQTPQPSAILSPCSYTTAVCSPPIQSP
 LATRTFHYSPTASQLSLMQPQQQLPQSQVQQTQTQTQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQ
 QQQQQPQTPGSSTPKNEVHKSTQALHNTNLTKVRPLSASQPSLPHEVSTLISRPHPTVGESLASIPQPV
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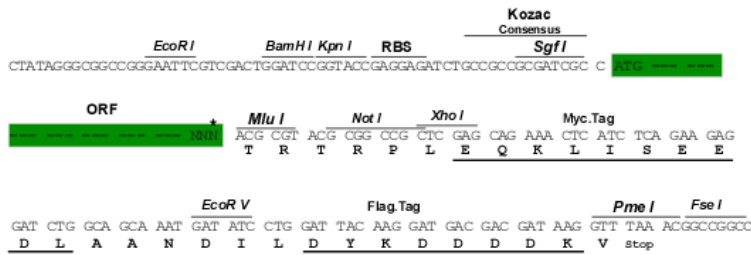
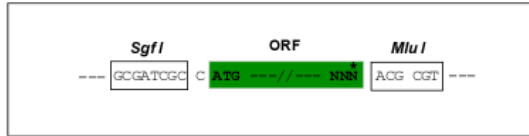
 TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9003_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

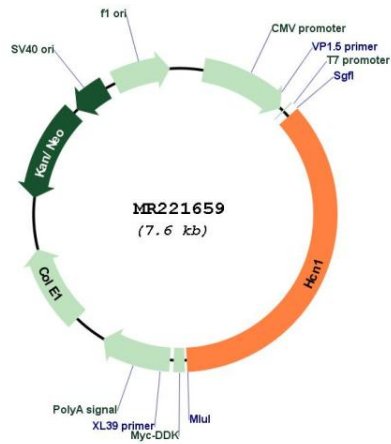


* The last codon before the Stop codon of the ORF

ACCN: NM_010408

ORF Size:	2730 bp
OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_010408.3 , NP_034538.2
RefSeq Size:	7911 bp
RefSeq ORF:	2733 bp
Locus ID:	15165
UniProt ID:	O88704
Cytogenetics:	13 66.34 cM
MW:	102.9 kDa
Gene Summary:	Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (If) and in neurons (Ih). May mediate responses to sour stimuli.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR221659