

## Product datasheet for **MG221659**

### Hcn1 (NM\_010408) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hcn1 (NM_010408) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hcn1
Synonyms:	Bcng1; C630013B14Rik; HAC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG221659 representing NM\_010408  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGAAGCGCGCGCAAACCCAACCTCCGCTCCAACAGCCGCGACGATGGCAACAGCGTCTTCCCCTCCA  
 AGGCGCCCGCGACGGGGCCGGTGGCGGCCGACAAGCGCCTGGGGACCCCGCGGGGGCGGCGCGGCCGG  
 GAAGGAACATGGCAACTCCGTGTGCTTCAAGGTGGACGGCGGAGGAGAGAGCCGGCGGCGAGCTTC  
 GAGGATGCCGAGGGGCCCGCGGCAGTATGGTTTCATGCAGAGGCAGTTCACCTCCATGCTGCAGCCTG  
 GGGTCAACAAATTCTCCCTCCGATGTTTGGGAGCCAGAAGGCGGTGGAGAAGGAGCAGGAAAGGTTAA  
 AACTGCAGGCTTCTGGATTATCCATCCGTACAGTACTTCAGGTTTTATTGGGATTTAATCATGCTTATA  
 ATGATGGTTGGAAATTTGGTCATCATACCAGTTGGAATCACGTTCTTACAGAGCAGACGACAACACCGT  
 GGATTATTTTCAACGTGGCATCCGATACTGTTTCTGTTGGACTTAATCATGAATTTTAGGACTGGGAC  
 TGCAATGAAGACAGCTCGAAATCATCTGGACCCTAAAGTGATCAAGATGAATTTTAAAAAGCTGG  
 TTTGTGGTGGACTTCATCTCATCGATCCCGGTGGATTATATCTTTCTCATTGTAGAGAAAGGGATGGACT  
 CAGAAGTTTACAAGACAGCCAGAGCACTTCGTATCGTGAGGTTTACAAAAATTCTCAGTCTCTTGCGGTT  
 ATTACGCCTTTCAAGTTAATCAGATACATACACCAGTGGGAAGAGATATTCCACATGACCTATGACCTC  
 GCCAGTGTGTGGTGGAGATCTTCAACCTCATTGGCATGATGCTGCTTCTGTGCCACTGGGATGGCTGTC  
 TTCAGTTCCTGGTTCCCTGTGCGAGGACTTCCCACCAGATTGCTGGGTTTCTCTGAATGAAATGGTTAA  
 TGATTCTGGGAAAAACAATATTCCTACGCACTTCAAAGCTATGAGTCACATGCTGTGCATTGGTTAT  
 GCGCCCAAGCCCTGTGAGCATGTCTGACCTCTGGATTACCATGCTGAGCATGATTGTGGGCGCCACCT  
 GTCAGCAATGTTTGTGGCCATGCCACAGCTTTGATCCAGTCTTTGGACTCTTCAAGGAGCAGTATCA  
 AGAGAAGTATAAGCAAGTAGAGCAATACATGTCATTCCACAAGTTACCAGCTGACATGCGCCAGAAGATA  
 CATGATTACTATGAGCACCGATACCAAGCAAGATCTTCGATGAAGAAAAATTCTCAGTGAAGTAAATG  
 ATCCTCTGAGAGAGGAAATAGTCAACTTCAACTGCCGAAACTGGTGGCAACTATGCCTCTTTTTGCTAA  
 CGCCGATCCCAATTTCTGACGGCCATGCTGAGCAAGCTGAGATTTGAGGTGTTCCAGCCCGGAGACTAT  
 ATCATTGAGAAGGAGCTGTGGGAAGAAAAATGATTTTCCATCCAGCACGGTGTGCTGGCGTTATCACCA  
 AGTCCAGTAAAGAAATGAAGCTGACAGATGGCTTACTTCGGAGAGATATGCCTGCTGACCAAGGGCCG  
 GCGCACTGCCAGTGTCCGAGCTGATACCTACTGTCGTCTTACTCCCTTTCGGTGGACAATTTCAATGAG  
 GTCTTGGAGGAATATCCAATGATGAGAAGGCCTTTGAGACAGTTGCTATTGACCGACTCGATCGGATAG  
 GCAAGAAAAACTTATTCTCCTGCAAGAAGTTCCAGAAGGATCTAAACACTGGTGTTTTCAACAACCAGGA  
 GAACGAGATCCTGAAGCAGATCGTGAAGCATGACCGAGAGATGGTACAAGCTATCCCTCCAATCAACTAT  
 CCTCAAATGACAGCCCTCAACTGCACATCTTCAACCACCACCCCAACCTCCCGCATGAGGACCCAATCTC  
 CGCCAGTCTACACCGCAACCAGCCTGTCTCACAGCAATCTGCACTACCCAGTCCAGCACACAGAGGCC  
 CCAACCCTCAGCCATCCTTTCACCCTGCTCCTATACCACAGCAGTCTGCAGTCTCCTATACAGAGCCCC  
 CTGGCCACACGAACCTTCCATTATGCCTCTCCCACTGCGTCCCAGCTGTCACTCATGCAGCAGCCTCAGC  
 AGCAACTACCGCAGTCCAGGTACAGCAGACTCAGACTCAGACTCAGCAGCAGCAGCAGCAGCAGCAGCAGC  
 CAGCAGCAGCAGCAGCCACAGACACCTGGTAGCTCCACACCGAAAAATGAAGTGCAACAAGAGCACACAAG  
 CCCTTCATAACCAACCTGACCAAGAAGTCAAGGCCCTTTCGCTCGCAGCCTTCTCTGCCCATGA  
 GGTCTCCACTTTGATCTCCAGACCTCATCCCACTGTGGGCGAATCCCTGGCCTCTATCCCTCAACCCGTG  
 GCAGCAGTCCACAGCACTGGCCTTCAGGCGGGAGCAGGAGCACAGTGCCACAACGTGTACCTTGTTC  
 GACAGATGTCCTCGGAGCCATCCCCCAACCGAGGAGTGCCTCCAGCACCCCTCCACCAGCAGCTGT  
 GCAGAGAGAGTCTCCCTCAGTCTAAATACAGACCCAGATGCAGAAAAACCCCGTTTTGCTTCAATTTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG221659 representing NM\_010408  
 Red=Cloning site Green=Tags(s)

```
MEGGGKPNASNSRDDGNSVFPSKAPATGPVAADKRLGTPPGGGAAGKEHGNSVCFKVDGGGGGEEPAGSF
EDAEGPRRQYGFMRQFTSMLQPGVNFSLRMFGSQKAVEKEQERVKTAGFWIIHPYSDFRIFYWDLIMLI
MMVGNLVIIPVGIITFFTEQTTTPWIIFNVASDTVFLDLIMNFRTGTVNEDSSEIILDPKVIKMNYLKSW
FVVDFISSIPVDYIFLIVEKGMDESEVYKTARALRIVRFKILSLLRLLRSLRIRYIHQWEEIFHMTYDL
ASAVVRIFNLIGMMLLLCHWDGCLQFLVPLLQDFPPDCWVSLNEMVNDSWGKQYSYALFKAMSHMLCIGY
GAQAPVMSDLWITMLSMIVGATCYAMFVGHATALIQSLDSSRRQYQEKYKQVEQYMSFHKLPAIDMRQKI
HDYYEHRYQGKIFDEENILSELNDPLREEIVNFNCRKLVATMPLFANADPNFVTAML SKLRFVFPQGDY
IIREGAVGKKMYFIQHGAVGVITKSSKEMKLDGSYFGEICLLTKGRRTASVRADTYCRLYSLVDNFNE
VLEEYPMRRAFETVAIDRLDRIGKNSILLQKFQKDLNTGVFNNQENEILKQIVKHDREMVQAIPPINY
PQMTALNCTSSTTPTSRMRTQSPVYATSLSHSNLHSPSPSTQTPQPSAILSPCSYTTAVCSPPIQSP
LATRTFFHYASPTASQLSLMQPQQQLPQSQQVQTQTQTQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQ
QQQQQPQTPGSSTPKNEVHKSTQALHNTNLTKVRPLSASQPSLPHEVSTLISRPHPTVGESLASIPQPV
AAVHSTGLQAGSRSTVPQRVTLFRQMSSGAIPPNGVPPAPPPAAVQRESPSVLNTDPDAEKPRFASNL
```

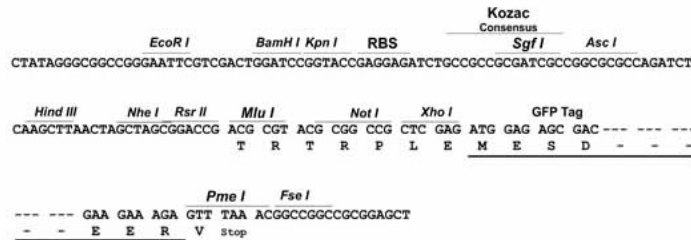
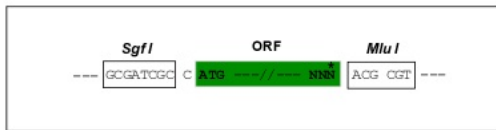
TRTRPLE - GFP Tag - V

Chromatograms: [https://cdn.origene.com/chromatograms/ja2181\\_a03.zip](https://cdn.origene.com/chromatograms/ja2181_a03.zip)

Restriction Sites: SgfI-MluI

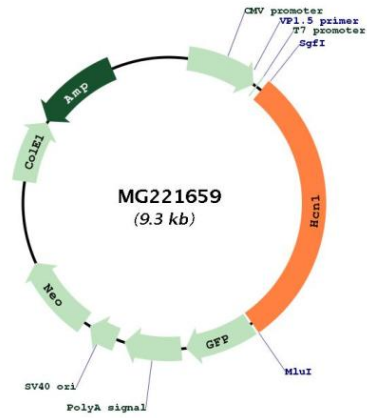
Cloning Scheme:

Cloning sites used for ORF Shuttling:



<b>ACCN:</b>	NM_010408
<b>ORF Size:</b>	2730 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<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_010408.3</a> , <a href="#">NP_034538.2</a>
<b>RefSeq Size:</b>	7911 bp
<b>RefSeq ORF:</b>	2733 bp
<b>Locus ID:</b>	15165
<b>UniProt ID:</b>	<a href="#">O88704</a>
<b>Cytogenetics:</b>	13 66.34 cM
<b>Gene Summary:</b>	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 MG221659