

Product datasheet for **RG215008**

ATP2C1 (NM_001001487) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP2C1 (NM_001001487) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP2C1
Synonyms:	ATP2C1A; BCPM; HHD; hSPCA1; PMR1; SPCA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG215008 representing NM_001001487
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGGTTGCACGTTTTCAAAAAATACCTAATGGTGAAAATGAGACAATGATTCCTGTATTGACATCAA
 AAAAAAGCAAGTGAATTACCAAGTCAGTGAAGTTGCAAGCATTCTCCAAGCTGATCTTCAGAATGGTCTAAA
 CAAATGTGAAGTTAGTCATAGGCGAGCCTTTCATGGCTGGAATGAGTTTGATATTAGTGAAGATGAGCCA
 CTGTGGAAGAAGTATATTTCTCAGTTTAAAAATCCCTTATTATGCTGCTTCTGGCTTCTGCAGTCATCA
 GTGTTTTAATGCATCAGTTTGTATGATGCCGTGAGTACTGTTGGCAATACTTATCGTTGTTACAGTTGC
 CTTTGTTCAGGAATATCGTTTCAGAAAAATCTCTGAAGAATTGAGTAACTTGTGCCACCAGAATGCCAT
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 CTGTTGGGATAGAGTTCTGCTGACTTACGCTTGTGGAGGCTGTGGATCTTCCATTGATGAGTCCAG
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 GCATCGAGAAGTAACATTGCCTTTATGGGAACACTGGTCAGATGTGGCAAAGCAAAGGGTGTGTCATTG
 GAACAGGAGAAAAATTCTGAATTTGGGGAGGTTTTTAAAAATGATGCAAGCAGAAGAGGCCACAAAAACCC
 TCTGCAGAAGAGCATGGACCTCTTAGGAAAAACACTTTCCTTTTACTCCTTTGGTATAATAGGAATCATC
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 CAGCAATTCCTGAAGGTCTCCCATTTGGTTCACAGTACAGTACAGTCTTGGTGTATGAGAATGGTGAA
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 AAAACTGGAACACTGACGAAGAATGAAATGACTGTTACTCACATTTACTTCAGATGGTCTGCATGCTG
 AGGTTACTGGAGTTGGCTATAATCAATTTGGGGAAGTATTGTTGATGGTGTGTTTTCATGTTTCTA
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 CTAATGGGGAAGCCAACAGAAGGGCCCTTAATTGCTCTTGAATGAAGATGGGTCTTGTGACTTCAAC
 AAGACTACATCAGAAAAGCTGAATACCCTTTAGCTCTGAGCAAAAGTGGATGGCTGTTAAGTGTGTACA
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 AGGCACGCATGGGCTCAGCGGGACTCAGAGTCTTGTCTTGGCTTCTGGTCTGAACTGGGACAGCTGAC
 ATTTCTTGGCTTGGTGGGAATCATTGATCCACCTAGAAGTGGTGTGAAAGAAGCTGTTACAACACTCATT
 GCCTCAGGAGTATCAATAAAAAATGATTACTGGAGATTCACAGGAGACTGCAGTTGCAATCGCCAGTCGTC
 TGGGATTTGATTCCAAAACCTCCAGTCACTCAGGAGAAGAAATAGATGCAATGGATGTTTCAGCAGCT
 TTCACAAATAGTACCAAAGGTTGCAATTTTACAGAGCTAGCCCAAGGCACAAGATGAAAAATTATTAAG
 TCGCTACAGAAGAACGGTTCAGTTGTAGCCATGACAGGAGATGGAGTAAATGATGCAAGTGTCTGAAGG
 CTGCAGACATTGGAGTTGCGATGGGCCAGACTGGTACAGATGTTTCAAAGAGGCAGCAGACATGATCCT
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 AGTGTGCATAGTGGCAGAAATTATAAGAAGGTTGAAAGGAGCAGGGAAAAGATCCAGAAGCATGTCTGG
 CTCTGGGAGAGGAGTGGACAGCAGCTGGTTGAGATACATCCCCATCTGGAGACAGGACTGCCACTGACAG
 AAGATGTGAGCTGTGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG215008 representing NM_001001487
 Red=Cloning site Green=Tags(s)

MKVARFQKIPNGENETMIPVLTSSKASELPVSEVASILQADLQNLKCEVSHRRAFHGWNFEFDISEDEP
 LWKKYISQFKNPLIMLLASAVISVLMHQFDDAVSITVAIILIVTVAFVQEQYRSEKSLLEELSKLVPPECH
 CVREGKLEHTLARLDLVPGDTVCLSVGDRVPADLRLEAVDLSIDESSLTGETTPCSKVTAPQPAATNGDL
 ASRSNIAFMGTLVRCGKAKGVVIGTGENSEFGEVFKMMQAEAPKTPKQSMDDLKQLSFYSFGIIGII
 MLVGVLLKGDILEMFTTISVSLAVAAIPEGLPIVVTVTLALGVMRMVKKRAIVKKLPIVETLGCNVICSD
 KTGTLTKNEMTVTHIFTSGLHAEVTGVGYNQFGEVIVDGDVVHGFYNPAVSRIVEAGVCNDAVIRNNT
 LMGKPTGALIALAMKMGDLGLQQDYIRKAEYFSSSEQKWMVAVKCVHRTQQDRPEICFMKGAYEQVIKYC
 TTYQSKGQTLTLTQQQRDVYQEQEKARMGSAGLRVLALASGPELGQLTFLGLVGIIDPRTGVKEAVTTLI
 ASGVSIKMITGDSQETAVAIASRLGLYSKTSQSVSGEEIDAMDVQQLSQIVPKVAVFYRASPRHKMKI
 SLQKNGSVVAMTGDGVNDAVALKAADIGVAMGQTGTDVCKEADMILVDDDFQTIMSAIEEGKGIYNNIK
 NFVRFQLSTIAALTLISLATLMNFPNPLNAMQILWINIIMDGPPAQLGVEPVDKDVIRKPPRNWKDSI
 LTKNLILKILVSSIIIVCGTLFVFWREL RDNVITPRD TMTFTCFVFFDMFNALSSRSQTKSVFEIGLCS
 NRMFCYAVLGSIMGQLLVIYFPPLQKVFQTESLSILDLLFLLGLTSSVCIVAEI IKKVERSREKI QKHVW
 LWERSGQQLVEIHPHLETGLPLTEDVSCV

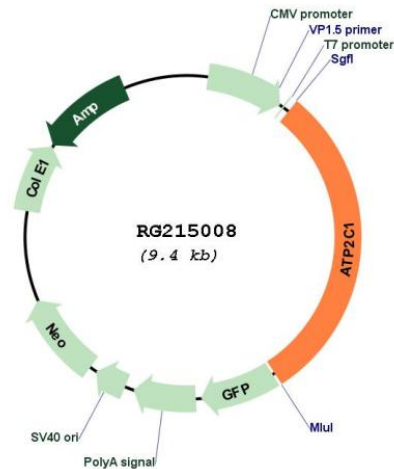
TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001001487

ORF Size: 2817 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 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](#)

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:**
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_001001487.2
RefSeq Size:	3484 bp
RefSeq ORF:	2820 bp
Locus ID:	27032
UniProt ID:	P98194
Cytogenetics:	3q22.1
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	<p>The protein encoded by this gene belongs to the family of P-type cation transport ATPases. This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium ions. Defects in this gene cause Hailey-Hailey disease, an autosomal dominant disorder. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011]</p>