

Product datasheet for **RG214954**

ATP2C1 (NM_001001486) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP2C1 (NM_001001486) 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:**

>RG214954 representing NM_001001486
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGGTTGCACGTTTTCAAAAAATACCTAATGGTGAAAATGAGACAATGATTCCTGTATTGACATCAA
 AAAAAAGCAAGTGAATTACCAAGTCAGTGAAGTTGCAAGCATTCTCCAAGCTGATCTTCAGAATGGTCTAAA
 CAAATGTGAAGTTAGTCATAGGCGAGCCTTTCATGGCTGGAATGAGTTTGATATTAGTGAAGATGAGCCA
 CTGTGGAAGAAGTATATTTCTCAGTTTAAAAATCCCTTATTATGCTGCTTCTGGCTTCTGCAGTCATCA
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 GAACAGGAGAAAAATTCTGAATTTGGGGAGGTTTTTAAAAATGATGCAAGCAGAAGAGGCCACAAAAACCC
 TCTGCAGAAGAGCATGGACCTCTTAGGAAAAACACTTTCCTTTACTCCTTTGGTATAATAGGAATCATC
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 TCGACATCATCTTTTCTTGAAGTCTGGCTCTGGGAGAGGAGTGGACAGCAGCTGTTGAGATACATC
 CCCATCTGGAGACAGGACTGCCACTGACAGAAGATGTGAGCTGTGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214954 representing NM_001001486
 Red=Cloning site Green=Tags(s)

MKVARFQKIPNGENETMIPVLTSSKASELPVSEVASILQADLQNLNKEVSHRRAFHGWNFEFDISEDEP
 LWKKYISQFKNPLIMLLLASAVISVLMHQFDDAVSITVAIILIVTVAFVQEQYRSEKSLLEELSKLVPPECH
 CVREGKLEHTLARLDLVPGDTVCLSVGDRVPADLRLEAVDLSIDESSLTGETTPCSKVTAPQPAATNGDL
 ASRSNIAFMGTLVRCGKAKGVVIGTGENSEFGEVFKMMQAEAPKTPKQSMDDLKQLSFYSFGIIGII
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 TTYQSKGQTLTLTQQQRDVYQEKARMGSAGLRVLALASGPELGQLTFLGLVGIIDPRTGVKEAVTTLI
 ASGVSIKMITGDSQETAVAIASRLGLYSKTSQSVSGEEIDAMDVQQLSQIVPKVAVFYRASPRHKMKI
 SLQKNGSVVAMTGDGVNDAVALKAADIGVAMGQTGTDVCKEADMILVDDDFQTIMSAIEEGKGIYNNIK
 NFVRFQLSTIAALTLISLATLMNFPNPLNAMQILWINIIMDGPPAQLSGVEPVKDVIRKPPRNWKDSI
 LTKNLILKILVSSIIIVCGTLFVFWREL RDNVITPRD TMTFTCFVFFDMFNALSSRSQTKSVFEIGLCS
 NRMFCYAVLGSIMQQLVIYFPPLQKVFQTESLSILDLLFLLGLTSSVCIVAEI IKKVERSREKIQKHVS
 STSSSFLEVWLWERSGQQLVEIHPHLETGLPLTEDVSCV

TRTRPLE – GFP Tag – V

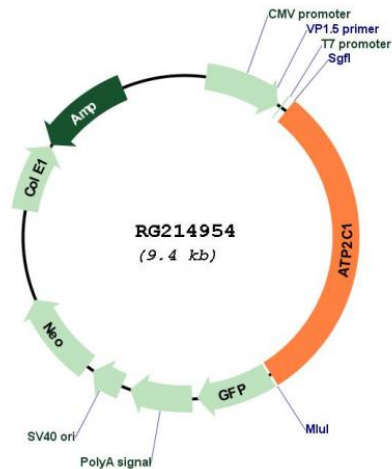
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_001001486

ORF Size: 2847 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:

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_001001486.2](#)

RefSeq Size: 3514 bp

RefSeq ORF: 2850 bp

Locus ID: 27032

UniProt ID: [P98194](#)

Cytogenetics: 3q22.1

Protein Families: Druggable Genome, Transmembrane

Gene Summary: 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]