

## Product datasheet for **RG233184**

### **ATP2C1 (NM\_001199182) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ATP2C1 (NM_001199182) 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:**

>RG233184 representing NM\_001199182  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGATAGTCTGTGCTCCATCTAGATTCTTATTTCAAAAAATATCCTCTCCATGCAATTAGGAGAT  
 ATTTATCGACGCTGAGAAACCAAAGAGCCGAAGAACAGGTTGCACGTTTTCAAAAAATACCTAATGGTGA  
 AAATGAGACAATGATTCCTGTATTGACATCAAAAAAGCAAGTGAATTACCAGTCAGTGAAGTTGCAAGC  
 ATTCTCCAATTTAAAAATCCCCTTATTATGCTGCTTCTGGCTTCTGCAGTCATCAGTGTTTAATGCATC  
 AGTTTGTATGATGCCGTCAGTATCACTGTGGCAATACTTATCGTTGTTACAGTTGCCTTTGTTTCAGGAATA  
 TCGTTTCAGAAAAATCTCTGAAGAATTGAGTAACTTGTGCCACCAGAATGCCATTGTGTGCGTGAAGGA  
 AAATTGGAGCATACACTGCCCCGAGACTTGGTCCAGGTGATACAGTTTGCCTTTCTGTTGGGGATAGAG  
 TTCTGCTGACTACGCTTGTGAGGCTGTGGATCTTCCATTGATGAGTCCAGCTTGACAGGTGAGAC  
 AACGCCTTGTCTAAGGTGACAGCTCCTCAGCCAGCTGCAACTAATGGAGATCTTGCATCGAGAAGTAAC  
 ATTGCCCTTATGGGAACACTGGTCAGATGTGGCAAAGCAAAGGGTGTTCATTGGAACAGGAGAAAATT  
 CTGAATTTGGGGAGGTTTTTAAAAATGATGCAAGCAGAAGAGGCACCAAAAACCCCTCTGCAGAAGAGCAT  
 GGACCTCTTAGGAAAACAACCTTCTTTACTCCTTTGGTATAATAGGAATCATCATGTTGGTTGGCTGG  
 TTAAGTGGAAAAGATATCCTGGAATGTTTACTATTAGTGAAGTTGGCTGTAGCAGCAATTCCTGAAG  
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 GAAAAAGCTGCCTATTGTTGAACTCTGGGCTGCTGTAATGTGATTTGTTTCAGATAAACTGGAACACTG  
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 GCTATAATCAATTTGGGGAAGTATTGTTGATGGTGTGTTGTTTCATGGATTCTATAACCCAGCTGTTAG  
 CAGAATTTGAGGCGGGCTGTGTGCAATGATGCTGTAATTAGAAAACAATACTCTAATGGGGAAGCCCA  
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 AAGCTGAATACCCTTTTAGCTCTGAGCAAAAGTGGATGGCTGTTAAGTGTGTACACCGAACACAGCAGGA  
 CAGACCAGAGATTTGTTTTATGAAAGGTGCTTACGAACAAGTAATTAAGTACTGTACTACATACCAGAGC  
 AAAGGGCAGACCTTGACACTTACTCAGCAGCAGAGAGATGTGTACCAACAAGAGAAGGCACGCATGGGCT  
 CAGCGGGACTCAGAGTCTTGGCTTCTGGTCTGAACTGGGACAGCTGACATTTCTTGGCTTGGT  
 GGGAAATCATTGATCCACCTAGAAGTGGTGTGAAAGAAGCTGTTACAACACTCATTGCCTCAGGAGTATCA  
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 AAACCTCCAGTCAGTCTCAGGAGAAGAAATAGATGCAATGGATGTTTCAGCAGCTTTCACAAATAGTACC  
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 GGTTTCAGTTGTAGCCATGACAGGAGATGGAGTAAATGATGCAGTTGCTCTGAAGGCTGCAGACATTGGAG  
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 TCAATGCCATGCAGATTTTGGGATCAATATTATTATGGATGGACCCCGCTCAGAGCCTTGGAGTAGA  
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 ATACTTAAAAACTTGTTCATCAATAATCATTGTTTGGGACTTTGTTTGTCTTCTGGCGTGAGCTAC  
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 TGCACTAAGTTCAGATCCCAGACCAAGCTGTGTTTGGATTGGACTCTGCAGTAATAGAATGTTTTGC  
 TATGCAGTTCTTGGATCCATCATGGGACAATTACTAGTTATTTACTTTCTCCGCTTCAGAAGGTTTTTC  
 AGACTGAGAGCCTAAGCATACTGGATCTGTTGTTTCTTTGGGTCTCACCTCATCAGTGTGCATAGTGGC  
 AGAAATTATAAAGAAGGTTGAAAGGAGCAGGAAAAGATCCAGAAGCATGTTAGTTCGACATCATCATCT  
 TTTCTTGAAGTCTGGCTCTGGGAGAGGAGTGGACAGCAGCTGGTTGAGATACATCCCATCTGGAGACAG  
 GACTGCCACTGACAGAAGATGTGAGCTGTGC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG233184 representing NM\_001199182  
 Red=Cloning site Green=Tags(s)

MDSLLPPSRFSYFKKYPLHAIRRYLSTLRNQRAEEQVARFQKIPNGENETMIPVLTSKKASELPVSEVAS  
 ILQFKNPLIMLLASAVISVLMHQFDDAVSITVAILIVVTVAQVQYRSEKSLLEELSKLVPPECHCVREG  
 KLEHTLARLDLVPDGLVCLVSGDRVPADLRLFEAVDLSIDESSLTGETTPCSKVTAPQPAATNGDLASRSN  
 IAFMGTLVRCGKAKGVVIGTGENSEFGEVFKMMQAEAPKTPKQKSMDDLKQKLSFYSGFIIGIIMLVGW  
 LLGKDILEMFTISVSLAVAAIPEGLPIVVTVTLALGVMRMVKKRAIVKKLPIVETLGCCNVICSDKTGTL  
 TKNEMTVTHIFTS DGLHAEVTGVGYNQFGEVIVDGDVVHGFYNPAVSRIVEAGCVNDVIRNNTLMGKP  
 TEGALIALAMKMGDLGLQDDYIRKAEYFSSSEQKWMVAVKCVHRTQQDRPEICFMKGAYEQVIKYCTTYQS  
 KGQTLTLTQQQRDVYQEKARMGSAGLRVLAALASGPELGQLTFLGLVGIIDPPRTGVKEAVTTLIASGVS  
 IKMITGDSQETAVAIASRLGLYSKTSQSVSGEEIDAMDVQQLSQIVPKVAVFYRASPRHKMKI IKS LQKN  
 GSVVAMTGDGVNDAVALKAADIGVAMGQTGTDVCKEAADMILVDDDFQTIMSAIEEGKGIYNNIKNFVRF  
 QLSTSI AAL TLISLATLMNFPNPLNAMQILWINIIMDGPPAQLSGVEPVDKDVIKPPRNWKDSILTKNL  
 ILKILVSSIIIVCGTLFVFWREL RDNVITPRD TTMTFTCFVFFDMFNALSSRSQTKSVFEIGLCSNRMFC  
 YAVLGSIMGQLLVYFPPLQKVFQTESLSILDLLFLLGLTSSVCIVAEI I K K V E R S R E K I Q K H V S S T S S S  
 FLEVWLWERSGQLVEIHPHLETGLPLTEDVSCV

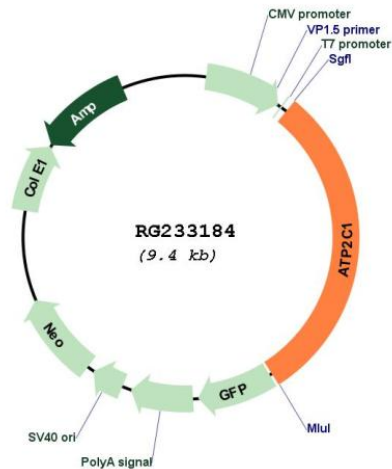
TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001199182

**ORF Size:** 2832 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\\_001199182.2](#)

**RefSeq Size:** 3615 bp

**RefSeq ORF:** 2835 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]