

## Product datasheet for **RC215008**

### **ATP2C1 (NM\_001001487) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ATP2C1 (NM_001001487) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP2C1
Synonyms:	ATP2C1A; BCPM; HHD; hSPCA1; PMR1; SPCA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC215008 representing NM\_001001487  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGGTTGCACGTTTTCAAAAAATACCTAATGGTGAAAATGAGACAATGATTCCTGTATTGACATCAA  
 AAAAAAGCAAGTGAATTACCAAGTCAGTGAAGTTGCAAGCATTCTCCAAGCTGATCTTCAGAATGGTCTAAA  
 CAAATGTGAAGTTAGTCATAGGCGAGCCTTTCATGGCTGGAATGAGTTTGATATTAGTGAAGATGAGCCA  
 CTGTGGAAGAAGTATATTTCTCAGTTTAAAAATCCCTTATTATGCTGCTTCTGGCTTCTGCAGTCATCA  
 GTGTTTTAATGCATCAGTTTGTATGATGCCGTGAGTACTGTTGGCAATACTTATCGTTGTTACAGTTGC  
 CTTTGTTCAGGAATATCGTTTCAGAAAAATCTCTGAAGAATTGAGTAACTTGTGCCACCAGAATGCCAT  
 TGTGTGCGTGAAGGAAAATTGGAGCATACACTGCCCCGAGACTTGGTCCAGGTGATACAGTTTGCCTTT  
 CTGTTGGGGATAGAGTTCTGCTGACTTACGCTTGTGGAGGCTGTGGATCTTCCATTGATGAGTCCAG  
 CTTGACAGGTGAGACAACGCCTTGTCTAAGGTGACAGCTCCTCAGCCAGCTGCAACTAATGGAGATCTT  
 GCATCGAGAAGTAACATTGCCTTTATGGGAACACTGGTCAGATGTGGCAAAGCAAAGGGTGTGTCATTG  
 GAACAGGAGAAAAATTCTGAATTTGGGGAGGTTTTTAAAAATGATGCAAGCAGAAGAGGCCACAAAAACCC  
 TCTGCAGAAGAGCATGGACCTCTTAGGAAAAACACTTTCCTTTTACTCCTTTGGTATAATAGGAATCATC  
 ATGTTGGTTGGCTGGTTACTGGGAAAAGATATCCTGGAATGTTTACTATTAGTGAAGTTTGGCTGTAG  
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 GAAAAGGGCCATTGTGAAAAAGCTGCCTATTGTTGAACTCTGGGCTGCTGTAATGTGATTTGTTTCAGAT  
 AAAACTGGAACACTGACGAAGAATGAAATGACTGTTACTCACATTTTACTTCAGATGGTCTGCATGCTG  
 AGGTTACTGGAGTTGGCTATAATCAATTTGGGGAAGTATTGTTGATGGTGTGTTGTTTCATGCATCTA  
 TAACCCAGCTGTTAGCAGAATTGTTGAGCGGGCTGTGTGTGCAATGATGCTGTAATTAGAAACAATACT  
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 AAGACTACATCAGAAAAGCTGAATACCCTTTAGCTCTGAGCAAAAGTGGATGGCTGTTAAGTGTGTACA  
 CCGAACACAGCAGGACAGACCAGAGATTTGTTTTATGAAAGGTGCTTACGAACAAGTAATTAAGTACTGT  
 ACTACATACCAGAGCAAAGGGCAGACCTTGACACTTACTCAGCAGCAGAGAGATGTGTACCAACAAGAGA  
 AGGCACGCATGGGCTCAGCGGGACTCAGAGTCTTGTCTTGGCTTCTGGTCTGAACTGGGACAGCTGAC  
 ATTTCTTGGCTTGGTGGGAATCATTGATCCACCTAGAAGTGGTGTGAAAGAAGCTGTTACAACACTCATT  
 GCCTCAGGAGTATCAATAAAAAATGATTACTGGAGATTCACAGGAGACTGCAGTTGCAATCGCCAGTCGTC  
 TGGGATTTGATTCCAAAACCTCCAGTCAGTCTCAGGAGAAGAAATAGATGCAATGGATGTTTCAGCAGCT  
 TTCACAAATAGTACCAAAGGTTGCAATTTTACAGAGCTAGCCCAAGGCACAAGATGAAAAATTATTAAG  
 TCGCTACAGAAGAACGGTTCAGTTGTAGCCATGACAGGAGATGGAGTAAATGATGCAAGTGTCTGAAGG  
 CTGCAGACATTGGAGTTGCGATGGGCCAGACTGGTACAGATGTTTCAAAGAGGCAGCAGACATGATCCT  
 AGTGGATGATGATTTTCAAACCAATATGTCTGCAATCGAAGAGGGTAAAGGGATTATAATAACATTA  
 AATTTTCGTTAGATTCCAGCTGAGCAGGATATAGCAGCATTAACTTTAATCTCATTGGCTACATTAATGA  
 ACTTTCTAATCCTCTCAATGCCATGCAGATTTTGTGGATCAATATTATGATGGATGGACCCCAAGCTCA  
 GAGCCTTGGAGTAGAACCAGTGGATAAAGATGTCATTGTAACCTCCTCGCAACTGGAAGACAGCATT  
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 TTTTGACATGTTCAATGCACTAAGTTCAGATCCAGACCAAGTCTGTGTTTGTGATTGGACTCTGCAGT  
 AATAGAATGTTTTGCTATGCAGTCTTGGATCCATCATGGGACAATTAAGTATTATTTCTTCTCCGC  
 TTCAGAAGGTTTTTCAGACTGAGAGCCTAAGCATACTGGATCTGTTGTTTCTTTGGGTCTCACCTCATC  
 AGTGTGCATAGTGGCAGAAATTATAAGAAGGTTGAAAGGAGCAGGGAAAAGATCCAGAAGCATGTCTGG  
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 AAGATGTGAGCTGTGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC215008 representing NM\_001001487  
 Red=Cloning site Green=Tags(s)

MKVARFQKIPNGENETMIPVLTSSKASELPVSEVASILQADLQNLKCEVSHRRAFHGWNFEFDISEDEP  
 LWKKYISQFKNPLIMLLASAVISVLMHQFDDAVSITVAIIVVTVAFVQEQYRSEKSLLEELSKLVPPECH  
 CVREGKLEHTLARLDLVPGDTVCLSVGDRVPADLRLEAVDLSIDESSLTGETTPCSKVTAPQPAATNGDL  
 ASRSNIAFMGTLVRCGKAKGVVIGTGENSEFGEVFKMMQAEAPKTPKQSMDDLKQQLSFYSFGIIGII  
 MLVGWLLGKDILEMFTISVSLAVAAIPEGLPIVVTVTLALGVMRMVKKRAIVKKLPIVETLGCNCVICSD  
 KTGTLTKNEMTVTHIFTS DGLHAEVTGVGYNQFGEVIVDGDVVHGFYNPAVSRIVEAGVCNDAVIRNNT  
 LMGKPTGEGALIALAMKMGDLGLQQDYIRKAEYFPFSEQKWMVAVKCVHRTQQDRPEICFMKGAYEQVIKYC  
 TTYQSKGQTLTLTQQQRDVYQEQEKARMGSAGLRVLALASGPELGQLTFLGLVGIIDPRTGVKEAVTTLI  
 ASGVSIIKMITGDSQETAVAIASRLGLYSKTSQSVSGEEIDAMDVQQLSQIVPKVAVFYRASPRHKMKI  
 SLQKNGSVVAMTGDGVNDAVALKAADIGVAMGQTGTDVCKEADMILVDDDFQTMSAIEEGKGIYNNIK  
 NFVRFQLSTIAALTLISLATLMNFPNPLNAMQILWINIIMDGPPAQLSGVEPVDKDVIRKPPRNWKDSI  
 LTKNLILKILVSSIIIVCGTLFVFWREL RDNVITPRD TMTFTCFVFFDMFNALSSRSQTKSVFEIGLCS  
 NRMFCYAVLGSIMQQLLVIYFPPLQKVFQTESLSILDLLFLLGLTSSVCIVAEI IKKVERSREKI QKHVW  
 LWERSGQQLVEIHPHLETGLPLTEDVSCV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**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](mailto: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](#)

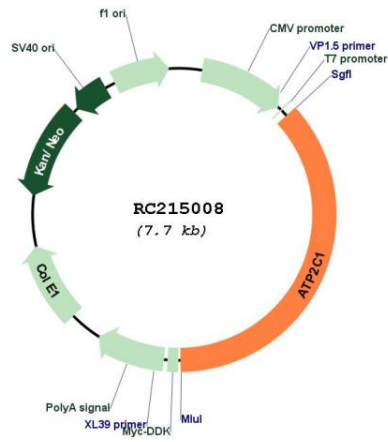
**Cytogenetics:** 3q22.1

**Protein Families:** Druggable Genome, Transmembrane

**MW:** 102.8 kDa

**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]

Product images:



Circular map for RC215008