

## Product datasheet for MC223909

### Atp2b2 (NM\_001036684) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atp2b2 (NM\_001036684) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Atp2b2  
**Synonyms:** D6Abb2e; dfw; Gena300; jog; PMCA2; Tmy; wms; wri  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC223909 representing NM\_001036684  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGTGACATGACCAACAGCGACTTTTACTCCAAAACCAAAGAAATGAGTCGAGCCATGGGGCGGAGT  
 TCGGGTGCACCATGGAGGAGCTGCGCTCCCTCATGGAGCTGCGGGGCACCGAGGCTGTGGTCAAGATCAA  
 GGAGACGTATGGGGACTGAAGCCATCTGCCGGCCCTCAAACCTCGCCTGTTGAAGGTTTACCAGGC  
 ACTGCTCCAGACTTGAAAAGAGGAAACAGATTTTGGGCAAACTTCATACCTCAAAGAAACCAAAAA  
 CCTTCCTGCAGCTGGTGTGGGAAGCGCTACAGGACGTGACACTTATCATCCTGGAGATCGCGGCCATCAT  
 CTCCTGGGACTGTCTTCTACCACCCACGGGAGAGCAATGAAGGATGTGCCACGGCCAGGGTGGG  
 GCAGAGGATGAAGGTGAAGCAGAAGCAGGCTGGATTGAGGGGGCTGCCATCCTGTGTGAGTGTGTG  
 TGGTCTGGTACAGCCTTCAATGACTGGAGTAAGGAGAAACAGTTCGGGGCCTGCAGAGCCGAATTGA  
 GCAGGAGCAGAAGTTCAGTGTGGTCCGGGCCGGCCAGGTGGTTCAGATCCCTGTGGCCGAGATCGTGGT  
 GGGGACATTGCCAGATCAAATATGGTGACCTTCTCCCGCTGATGGCCTTTCATCCAGGAAATGACC  
 TCAAAATTGATGAAAGCTCACTCACAGGGGAATCTGACCAGGTGCGCAAGTCTGTGGATAAGGACCCCA  
 GTTGCTGTGAGGAACCCATGTGATGGAGGCTCAGGACGGATGGTGGTTACTGTGGTGTGAACTCT  
 CAGACTGGCATCATATTTACCCTGCTTGGGGCTGGTGGTGAAGAGGAAGAGAAGAAAGACAAAAAGCCA  
 AGCAGCAGGATGGGGCAGCTGCCATGGAGATGCAGCCTCTGAAGAGTGCAGAGGGCGCGATGCAGATGA  
 CAAGAAGAAAGCCAACATGCACAAGAAAGAGAAGTCGGTGCTTCAGGGCAAGCTCACAAACTGGCTGTG  
 CAGATAGGCAAGGCGGGCCTGGTGTGTCGGCCATCACAGTGTGATCCTGGTACTTACTTCCCGTGG  
 ACACCTTCGTGGTCAACAAGAAGCCATGGCTGACGGAATGCACACCCGTCTACGTACAGTACTTTGTCAA  
 GTTCTTCATCATTGGTGTGACGGTGTGGTGGTGTGCTGTGCCGAGGGCCTCCCTCTGGCTGCACCATC  
 TCACTGGCCTATTCTGTGAAGAAAATGATGAAGGACAACAACCTGGTACGCCACCTGGATGCCTGTGAGA  
 CCATGGGCAATGCCACAGCCATCTGCTCAGACAAGACAGGAACGCTGACCACCAACCGCATGACCGTGGT  
 CCAGGCCATGTGCGGTGACGTCCACTACAAGGAGATCCCCGATCCAGCTCCATCAATGCCAAGACGCTG  
 GAGCTGCTGGTCAACGCCATTGCCATCAACAGCGCCTACACCACCAAGATCCTTCCCCAGAAAAAGAGG



GAGCCCTGCCCCGGCAGGTGGGCAACAAGACAGAGTGCGGCTGCTGGGCTTTGTGCTGGACTTGAGGCA  
 GGACTACGAGCCGGTGCGCAGCCAGATGCCAGAGGAGAAGCTGTATAAGGTGTACACCTTCAACTCCGTG  
 CGCAAGTCCATGAGCACCCTCATCAAGATGCCCGACGAGAGCTTCCGCATGTACAGCAAGGGCGCCTCGG  
 AGATTGTGCTCAAAAAGTGTGCAAGATCCTCAGTGGGGCAGGGGAAGCCCGTGTCTCCGGCCCCGAGA  
 CAGGGATGAGATGGTTAAGAAGGTGATTGAGCCATGGCCTGTGACGGGCTCCGTACCATCTGCGTGGCC  
 TATCGTACTTCCCAGCAGCCCTGACCCTGACTGGGACAATGAGAATGACATTCTCAATGAACTCACGT  
 GCATCTGCGTGGTGGGCATCGAAGACCCAGTACGACCTGAGGTCCCAGAAGCCATCCGCAAGTGCCAGCG  
 GGCAGGTATCACAGTCCGCATGGTCACCGGTGACAATATCAACACAGCCGGGCCATCGCCATCAAGTGT  
 GGCATTATCCACCCTGGAGAGGACTTCTGTGCCTGGAAGGCAAAAGAATTCAATCGGAGGATTCCGAACG  
 AGAAGGGGAGATTGAGCAGGAGCGGATTGACAAGATCTGGCAAAGCTGAGGGTGTGGCTCGCTCCTC  
 GCCCACGGATAAGCACACGCTGGTCAAAGGCATCATCGACAGTACACACTGAGCAGCGGCAGGTGGT  
 GCTGTGACAGGGGATGGGACCAACGACGGGCTGCTCTCAAGAAGGCAGATGTGGCTTCGCAATGGGCA  
 TCGCAGGCACAGATGTGGCAAGGAGGCCTCAGACATCATCTGACAGATGACAATTCCAGCAGCATCGT  
 CAAGGCAGTGATGTGGGCCGTAACGTCTATGACAGCATATCAAATTCCTGCAGTTCAGCTGACTGTC  
 AACGTGGTGGCGGTGATCGTGGCCTTACGGGGCCTGCATTACACAGGACTCCCCTCTCAAGGCTGTG  
 AGATGCTCTGGGTGAACCTCATCATGGACACGTTTGCCTCCCTGGCCCTGGCCACAGAGCCACTACGGA  
 GACTCTGCTTCTGAGAAACCGTACGGTCGCAACAAGCCGCTCATCTCGAGGACCATGATGAAGAATC  
 CTGGGCCACGCCGTCTACCAGCTCACCTCATCTTACCCTGCTCTTCTGGGTGAGAAGATGTTCCAGA  
 TCGACAGCGGAAGGAACGCCCGCTGCACTCACCCCTCAGAGCACTACACCATCATCTTCAACACCTT  
 CGTCATGATGCAGCTTTTCAACGAGATCAACGCCCGCAAGATCCACGGCGAGCGCAACGTCTTTGACGG  
 ATCTTCCGGAACCCATCTTCTGCACCATCGTTCTTGGCACTTTCGCCATCCAGATAGTGATCGTGCA  
 TTGGCGGGAAGCCCTTCCAGCTGCTCCCCACTCCAGCTGGACCAGTGGATGTGGTGCATCTCATAGGCC  
 GGGAGAGCTCGTCTGGGGCCAGGTGATCGCCACCATCCCTACCAGCAGGCTCAAGTTCCTGAAAGAGGCA  
 GGGCGTCTAACACAGAAGGAGGAGATCCCGAGGAGGAGTTAAATGAGGATGTGGAAGAGATAGACCACG  
 CAGAGCGGGAGCTTCGCGTGGCCAGATCCTGTGGTTCGGGGCCTGAATCGGATCCAGACACAGATCCG  
 CGTCGTGAAGGCGTTCCGTAGCTCTCTCTATGAAGGGTTAGAAAAACCGAGTCTCGAACCTCCATCCAT  
 AACTTCATGGCTCATCTGAATCCGGATCGAAGATTCCAGCCCCACATCCCCCTCATCGATGACACCG  
 ACCTGGAAGAAGATGCCGCGCTCAAGCAGAAGTCCAGCCCCCGTCTCGCTCAACAAGAACAATAGCGC  
 CATCGACAGCGGGATCAACCTGACGACCGACAGCAAAATCAGTACCTCTTCAAGTCCAGGGAGCCCC  
 ATCCACAGCCTGGAGACGTCGCTTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_001036684  
**Insert Size:** 3597 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>Components:</b>	<p>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).</p>
<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_001036684.2</a> , <a href="#">NP_001031761.1</a>
<b>RefSeq Size:</b>	6922 bp
<b>RefSeq ORF:</b>	3597 bp
<b>Locus ID:</b>	11941
<b>UniProt ID:</b>	<a href="#">Q9R0K7</a>
<b>Cytogenetics:</b>	6 52.85 cM
<b>Gene Summary:</b>	<p>This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell. Plays a role in maintaining balance and hearing. [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding region, compared to variant 3. These differences result in a shorter protein (isoform 1), compared to isoform 2. Variants 1 and 2 encode the same protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>