

## Product datasheet for MC223809

### Atp2b4 (NM\_001167949) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atp2b4 (NM_001167949) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Atp2b4
Synonyms:	Pmca4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223809 representing NM_001167949 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGACGAATCCACCAGGACAAAGCGTGTGAGCCAAACACAGTGGCTGAGAGCCATGAAGGGGAGTTGGCT  
GCACCTTAATGGACCTGCGAAAGCTCATGGAGCTTCGTGGAGCTGATGCAGTGGCCAGATCAGTGCCCA  
CTACGGAGGGGTACAGGAAATCTGCACTAGACTGAAAACCTCCCCTATAGAAGTCTATCTGGGAACCT  
GCAGATTTGGAGAAGCGTAGACTTGTTCGAAAGAAGCTGATACCTCCAAAAGGCCCAAGACTTTCT  
TAGAATTAGTGTGGGAAGCCCTGCAGGATGTCACGCTCATCATCTAGAGATCGCAGCCATCATCTCCCT  
GGTCTGTCTTCTACCGACCTCCGGGTGGAGATAATGAAATCTGTGGTACATTGCAAGTAGCCAGAA  
GAAGAGGAGGAAGGAGAACTGGCTGGATTGAGGGGGCGCCATTCTCGCCTCGGTGATCATTGTGGTAC  
TCGTGACAGCCTTCAATGACTGGAGCAAAGAGAAGCAGTTCGGGGGGCTGCAGAGTCGCATCGAACTGGA  
GCAAAAATTCCTCATTATCCGGAATGGTCAGCTTATCCAACCTCCAGTGGCTGAGATTGTGGTGGGAGAT  
ATTGCCAGATCAAAACGGTGACCTGCTGCCTGCAGATGGAATTCTAATCCAGGGAAATGATCTGAAGA  
TTGACGAGAGCTCTGACAGGAGAATCAGATCATGTCAAGAAGACTCTGGACAAAGACCCCATGTTGCT  
CTCGGGGACTCACGTGATGGAAGTTCGGACGGATGGTAGTACTGCTGTGGGGTCACTCCCAGACT  
GGAATCATCTTACCCTTTAGGAGCTAGTGAGGAAGAAGATGATGACAAGAAGAAGAAAGTAAAA  
AACAAAGGAGCCCTGAAAATCGCAACAAAGCAAAGACCCAGGATGGAGTGGCCTTGGAAATCCAGCCACT  
CAACAGCCAAGAGGGGCTCGACAGTGAGGACAAGGAGAAGAAAATAGCCAGGATACCCAAGAAAAGAGAAG  
TCGGTGTGCAAGGCAAACCTCACACGCCTGGCTGTGCAGATCGGGAAGGCGGGTCTGATCATGTCTGTCC  
TCACAGTTGTCATCTTGATTCTGTACTTTGTGGTTGACAATTCGTGATCCAGCGCCGAGAATGGCTTCC  
TGAGTGCACCTCTGTCTATATCCAGTATTTGTCAAGTCTTTCATCATCGGAGTCACTGTATTGGTAGTG  
GCTGTGCCAGAGGGGCTGCCACTGGCTGTACCATCTCACTAGCCTACTCTGTAAGAAAATGATGAAGG  
ACAACAACCTTGGTACGGCACTTGGATGCTGTGAGACAATGGCAATGCCACAGCCATTTGCTCCGATAA  
GACAGGCACACTGACCATGAACCGCATGACCGTGGTGCAAGCTTACATCGGGGCACTCACTACCGCCAG



ATCCCACAGCCCACGTCTTCCCACCAAGGTTCTGGAGCTCATCGTCAATGGCATCTCTATCAACTGTG  
 CTTACACGTCTAAGATTCAGCCTCCAGAAAAGGAGGGAGGCTACCCCGACAAGTAGGCAACAAGACAGA  
 GTGTGGGCTGCTGGGCTTTGTCACAGACCTGAAGCAGGACTACCAAGCAGTTCGCAATGAGGTGCCTGAG  
 GAGAAGCTCTTTAAGGTGTACACCTTAACTCAGTGCAGCAAGTCCATGAGCACTGTATCAGGAAGCCGG  
 AAGGGGGCTTCCGCATGTTACAGCAAGGGCGCCTCTGAGATAATGCTGCGCAGGTGTATCGAATCCTGAA  
 CAAGGAAGGAGAAATCAAATCGTTCAGAAGTAAGGACCGAGATAATATGGTACGCAATGTCAATTGAGCCC  
 ATGGCCAGTGAAGGGCTCCGGACTATCTGCTTAGCTTACCGAGATTTTGTATGGCACAGAGCCCTCGTGGG  
 ACATTGAGGGTGAAATCCTCACTTCGCTGATCTGCATTGCAGTGGTGGGCATTGAGGATCCTGTGGCCCC  
 GGAGGTACCAGATGCAATTGCCAAATGCAAACGGGCTGGCATTACTGTGAGGATGGTGACAGGTGATAAT  
 GTCAACACAGCCCAGGCCATTGCCACCAATGTGGCATTCTGACTCCTAAAGATGACTTCTTGTGCCTGG  
 AAGGCAAGAATTCAACAGTCTTATCCGAAATGAGAAGGGTGGGTTGAACAAGAAAAGCTGGACAAGAT  
 CTGGCCCAAGCTTCGGTACTGGCAGATCTTCTCCACAGACAAGCACACATTGGTAAAGGTATCATT  
 GACAGCACTGCTGGGAACAGCGGCAGGTAGTGGCTGTCACCGGTGATGGAACAAATGATGGACCTGCTC  
 TGAAGAAAGCAGATGTCGGGTTTGTATGGGCATCGCAGGCACAGATGTGGCTAAGGAGGCGTCAGACAT  
 CATCCTGACCGATGACAACCTTACCAGCATTGTGAAGGCAGTGTGTGGGACGGAATGTGTATGACAGC  
 ATTTCCAAGTTCCTACAGTTCAGCTCACTGTCAATGTGGTGGCCGTGATTGTGGCTTCTACTGGAGCCT  
 GCATCACTCAGGATCCCCACTGAAAGCGGTGCAGATGTTGTGGGTTAACCTGATTATGGACACGTTTGC  
 TTCCCTGGCCCTGGCCACAGAGCCCCACCGAGTCTCTGTTGAGGCGCGCCCTATGGGCGAAACAAG  
 CCTCTGATCTCCCGCACTATGATGAAGAACATCTTGGCCATGCTGTGTATCAGCTCCTAATCGTCTTCC  
 TCCTCGTCTTGTGGGACACACTGTTTCGACATTGACAGTGGGAGGAAGGCACCTCTCAATTCGCCACC  
 CAGCCAGCACTACACCATTGTTTTCAACACGTTTGTGCTGATGCAACTCTTCAACGAAATCAACGCTCGG  
 AAGATCCACGGTGAGAAGAACGTGTTTGCAGGCGTCTACCGCAACATCATTTTCTGCACTGTAGTTTTGG  
 GCACATTTCTTCCAGATCATGATTGTTGAAGTGGGAGGAAGCCCTTCACTGCACAGCCCTGACCAT  
 GGAGCATTGGATGTGGTGTCTTTATAGGGATTGGAGAAGTGGGAGGTTGGGAGGTTGAGGTTGAGGTTG  
 CCTACCAAGTCTCTGAAGTTCCTGAAGGAGGCTGGCCACGGCAGTGACAAAGAGGACATCAGCAGGGATA  
 CTGAGGGAATGGACGAGATTGACCTTGCCGAGATGGAGCTTCGCCGAGGCCAGATCCTCTGGGTCCGTGG  
 CCTGAACCGGATTCAGACTCAGATTGACGTAATTAACAAATTCAGACGGAAGCCCTTAAAGAGAGTC  
 CGAGAGAACATGACTCAACACCTTGTGTAAGTGGTTCCTAGCTCCTATTCCGCAGCAGTTGCATCAC  
 TCAGAACTGCCCTCCATCTCTTCTGCCATCTTCTGCAGTTACATCTCCTCTGTGGGCACTGAGTG  
 A

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_001167949

**Insert Size:**

3501 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001167949.2](#), [NP\\_001161421.1](#)

**RefSeq Size:** 8292 bp

**RefSeq ORF:** 3501 bp

**Locus ID:** 381290

**UniProt ID:** [Q6Q477](#)

**Cytogenetics:** 1 57.95 cM

**Gene Summary:** Calcium/calmodulin-regulated and magnesium-dependent enzyme that catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell (By similarity). By regulating sperm cell calcium homeostasis, may play a role in sperm motility (PubMed:15078889).[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (a, also known as x/e or PMCA4a) represents the longer transcript but encodes the shorter isoform (a). 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.