

Product datasheet for **SC304976**

ATP2B3 (NM_021949) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP2B3 (NM_021949) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP2B3
Synonyms:	CFAP39; CLA2; OPCA; PMCA3; PMCA3a; SCAX1
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_021949, the custom clone sequence may differ by one or more nucleotides

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ATGGGCGACATGGCCAATAGTTCATCGAGTTCACCCCAAGCCCCAGCAGCAGCGGGAT
GTCCCCAGGCTGGAGGCTTTGGGTGCACGCTGGCGGAGCTGCGCACCTCATGGAGCTG
CGAGGGGCGGAGGCGCTGCAGAAGATCGAGGAGGCCTACGGGGATGTCAGCGGGCTCTGC
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CGCAGGCAGATCTACGGGCGAAGTTCATCCCCCAAAGCAACCAAGACCTTCTCGCAG
CTGGTGTGGGAGGCCCTGCAGGACGTGACCCTCATCATCTGGAGGTGGTGCCATCGTC
TCTCTGGGCTCTCGTTCTATGCGCCGAGGAGAGAGAGTGAAGCCTGTGGGAATGTG
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CTGCTGTCCGTCTCTGTGTGGTGTGGTACGGCCTTCAATGACTGGAGCAAGGAGAAG
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GGGCAGCTCCTCCAGGTCCTCCGTTGGCTGCGCTGGTGGTGGGGACATTGCCAGGTCAAG
TACGGCGACCTGCTGCCAGCCGACGGCGTGTCTATCCAGGCCAATGACCTCAAGATCGAC
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CTGCTCTCAGGCACTCATGTGCATGGAAGTTCTGGAAGAATGGTGGTACCGCCGTTGGC
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AACCGTATGACCGTGGTCCAGTCTACCTAGGAGACACCCACTACAAAGAGATTCGGGCC
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GCCTATACCACCAAAAATACTACCTCCTGAGAAGGAAGGGCCCTCCCACGCCAGGTGGGC
AATAAGACGGAGTGCGCCCTGCTGGGCTTCGTCTTGGACCTGAAGCGGGACTTCCAGCCC
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AAGTCCATGAGCACAGTCATCCGCATGCCCGACGGTGGCTTCCGCCTCTTCAGCAAGGGG
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CTTCATGACGTAACCAATCTTTCTACCCCTACTCAGCAATTCTCTCTGCTGCCAATCT
ACCAGTGTGCTGGGAATCCGGGTGGTGAAGCGTTCCGTAG
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_021949
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_021949.2](#), [NP_068768.2](#)

RefSeq Size: 6592 bp

RefSeq ORF: 3522 bp

Locus ID: 492

UniProt ID: [Q16720](#)

Cytogenetics: Xq28

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Calcium signaling pathway

Gene Summary: The protein encoded by this gene belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and play a critical role in intracellular calcium homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at least four separate genes and the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. This gene encodes the plasma membrane calcium ATPase isoform 3. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1) represents the longer transcript, but encodes the shorter isoform (3a). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.