

## Product datasheet for **SC308720**

### ATP7B (NM\_000053) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP7B (NM_000053) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP7B
Synonyms:	PWD; WC1; WD; WND
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_000053 edited  
 ATGCCTGAGCAGGAGACAGATCACAGCCAGAGAAGGGGCCAGTCGGAAAATCTTATCT  
 AAGCTTTCTTTGCTACCCGTGCTGGGAACCAGCAATGAAGAAGAGTTTGTCTTTGAC  
 AATGTTGGCTATGAAGGTGGTCTGGATGGCCTGGGCCCTTCTTCTCAGGTGGCCACCAGC  
 ACAGTCAGGATCTTGGGCATGACTTGCCAGTCATGTGTGAAGTCCATTGAGGACAGGATT  
 TCCAATTTGAAAGGCATCATCAGCATGAAGGTTCCCTGGAACAAGGCAGTGCCACTGTG  
 AAATATGTGCCATCGTTGTGTGCTGCAACAGGTTTGGCATCAAATGGGGACATGGGC  
 TTCGAGGCCAGCATTGCAGAAGGAAAGGCAGCCTCCTGGCCCTCAAGGTCCTTGCCTGCC  
 CAGGAGGCTGTGGTCAAGCTCCGGGTGGAGGGCATGACCTGCCAGTCCTGTGTGAGTCC  
 ATTGAAGGCAAGTCCGAAAAGTCAAGGAGTAGTGAGAGTCAAAGTCTCACTCAGCAAC  
 CAAGAGGCCGTCACTTATCAGCCTTATCTCATTGAGCCGAAAGACCTCAGGGACCAT  
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 TCAACCAGAGCAGTGGCACCAGCAAGTCTTCTACAGATCAAAGGCATGACCTGTGCA  
 TCCTGTGTCTAACATAGAAAGGAATCTGCAGAAAGAAGCTGGTGTCTCTCCGTGTTG



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GTTGCCTTGATGGCAGGAAAGGCAGAGATCAAGTATGACCCAGAGGTCATCCAGCCCTC  
 GAGATAGCTCAGTTCATCCAGGACCTGGGTTTTGAGGCAGCAGTCATGGAGGACTACGCA  
 GGCTCCGATGGCAACATTGAGCTGACAATCACAGGGATGACCTGCGCGTCTGTGTCCAC  
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 ACCAGCAAAGCCCTTGTTAAGTTTGACCCGAAATATCGGTCCACGGGATATTATCAAA  
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 GCAGAGGTGTGCCTTCGCACAAGTGGCAAGTCCAGGAGTCCAGAATAAAGGGAAG  
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 AGAAATGATTTGCTGGATGTGGTGGCTAGCATTACCTTTCCAAGAGGACTGTCCGAAGG  
 ATACGCATCAACCTGGTCTGGCACTGATTTATAACCTGGTTGGGATACCCATTGACGCA  
 GGTGTCTTTCATGCCATCGGCATTGTGCTGCAGCCCTGGATGGGCTCAGCGGCCATGGCA  
 GCCTCCTCTGTGCTGTGGTGTCTCATCCCTGCAGCTCAAGTGTATAAAGAAGCCTGAC  
 CTGGAGAGGTATGAGGCACAGGCGCATGGCCACATGAAGCCCTGACGGCATCCCAGGTC  
 AGTGTGCACATAGGCATGGATGACAGGTGGCGGGACTCCCCAGGGCCACACCATGGGAC  
 CAGGTCAGCTATGTCAGCCAGGTGTGCTGTCTCCCTGACGTCGACACAAGCCATCTCGG  
 CACAGCGTGCAGCAGACGATGATGGGGACAAGTGGTCTCTGCTCCTGAATGGCAGGGAT  
 GAGGAGCAGTACATCTGA

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_000053 unedited            AAAAACGCTCAGTTCATCCAGGACCTGGGTTTTGAGGCAGCAGTCATGGAGGACTACGCA            GGCTCCGATGGCAACATTGAGCTGACAATCACAGGGATGACCTGCGCGTCCTGTGTCCAC            AACATAGAGTCCAAACTCACGAGGACAAATGGCATCACTTATGCCTCCGTTGCCCTTGTC            TTCAGCAAAGCCCTTGTTAAGTTTGACCCGAAATTATCGGTCCACGGGATATTATCAAA            ATTATTGAGGAAATTGGCTTTCATGCTTCCCTGGCCCAGAGAAACCCCAACGCTCATCAC            TTGGACCACAAGATGAAATAAAGCAGTGAAGAAGTCTTTCCTGTGCAGCCTGGTGTTT            GGCATCCCTGTATGGCCTTAATGATCTATATGCTGATACCCAGCAACGAGCCCCACCAG            TCCATGGTCTGGACCACAACATCATTCCAGGACTGTCCATTCTAAATCTCATCTCTTTT            ATCTTGTGTACCTTTGTCCAGCTCCTCGGTGGTGGTACTTCTACGTTACAGGCCTACAAA            TCTCTGAGACACAGGTCAGCCAACATGGACGTGCTCATCGTCTGGCCACAAGCATTGCT            TATGTTTATTCTGGTATCCTGGTGGTGTGTGGCTGACAAGGCGGAGAGGACCCCT            GTGACATTCTCGACACGCCCCCATGCTCTTTGTGTTTATTGCCCTGGGCGGTGGCTG            GAACACTTGGCAAAGAGCAAACCCTCAGAAGCCCTGGCTAAACTCATGTCTCTCCAGCC            ACC</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;Forward primer walk for NM_000053 unedited            AAAAACGCTCAGTTCATCCAGGACCTGGGTTTTGAGGCAGCAGTCATGGAGGACTACGCA            GGCTCCGATGGCAACATTGAGCTGACAATCACAGGGATGACCTGCGCGTCCTGTGTCCAC            AACATAGAGTCCAAACTCACGAGGACAAATGGCATCACTTATGCCTCCGTTGCCCTTGTC            TTCAGCAAAGCCCTTGTTAAGTTTGACCCGAAATTATCGGTCCACGGGATATTATCAAA            ATTATTGAGGAAATTGGCTTTCATGCTTCCCTGGCCCAGAGAAACCCCAACGCTCATCAC            TTGGACCACAAGATGAAATAAAGCAGTGAAGAAGTCTTTCCTGTGCAGCCTGGTGTTT            GGCATCCCTGTATGGCCTTAATGATCTATATGCTGATACCCAGCAACGAGCCCCACCAG            TCCATGGTCTGGACCACAACATCATTCCAGGACTGTCCATTCTAAATCTCATCTCTTTT            ATCTTGTGTACCTTTGTCCAGCTCCTCGGTGGTGGTACTTCTACGTTACAGGCCTACAAA            TCTCTGAGACACAGGTCAGCCAACATGGACGTGCTCATCGTCTGGCCACAAGCATTGCT            TATGTTTATTCTGGTATCCTGGTGGTGTGTGGCTGACAAGGCGGAGAGGACCCCT            GTGACATTCTCGACACGCCCCCATGCTCTTTGTGTTTATTGCCCTGGGCGGTGGCTG            GAACACTTGGCAAAGAGCAAACCCTCAGAAGCCCTGGCTAAACTCATGTCTCTCCAGCC            ACC</p>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_000053
<b>Insert Size:</b>	6500 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	There is 5 nucleotide difference between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 5 amino acids.
<b>Components:</b>	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).

<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>	<u><a href="#">NM_000053.2</a></u> , <u><a href="#">NP_000044.2</a></u>
<b>RefSeq Size:</b>	6644 bp
<b>RefSeq ORF:</b>	4398 bp
<b>Locus ID:</b>	540
<b>UniProt ID:</b>	<u><a href="#">P35670</a></u>
<b>Cytogenetics:</b>	13q14.3
<b>Domains:</b>	E1-E2_ATPase, Hydrolase, HMA
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	<p>This gene is a member of the P-type cation transport ATPase family and encodes a protein with several membrane-spanning domains, an ATPase consensus sequence, a hinge domain, a phosphorylation site, and at least 2 putative copper-binding sites. This protein is a monomer, and functions as a copper-transporting ATPase which exports copper out of the cells, such as the efflux of hepatic copper into the bile. Alternate transcriptional splice variants, encoding different isoforms with distinct cellular localizations, have been characterized. Mutations in this gene have been associated with Wilson disease which is characterized by copper accumulation. [provided by RefSeq, Dec 2019]</p> <p>Transcript Variant: This variant (1) represents the longest transcript, and encodes the longest 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.</p>