

## Product datasheet for **SC104218**

### ATP5H (BC032245) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP5H (BC032245) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP5H
Synonyms:	ATP5JD; ATPQ; ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit d; ATP synthase, H <sup>+</sup> transporting, mitochondrial F1F0, subunit d; ATP synthase D chain, mitochondrial; My032 protein
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene ORF sequence for BC032245 edited ATGGCTGGGCGAAAACCTTGCTCTAAAAACCATTGACTGGGTAGCTTTTGCAGAGATCATA CCCCAGAACCAAAAGGCCATTGCTAGTTCCTGAAATCCTGGAATGAGACCCTCACCTCC AGGTTGGCTGCTTTACCTGAGAATCCACCAGCTATCGACTGGGCTTACTACAAGGCCAAT GTGGCCAAGGCTGGCTTGGTGGATGACTTTGAGAAGAAGTTTAAATGCGCTGAAGGTTCCC GTGCCAGAGGATAAATATACTGCCAGGTGGATGCCGAAGAAAAAGAAGATGTGAAATCT TGTGCTGAGTGGGTGCTCTCTCAAAGGCCAGGATTGTAGAATATGAAAAAGAGATGGAG AAGATGAAGAACTTAATTCCATTTGATCAGATGACCATTGAGGACTTGAATGAAGCTTTC CCAGAAACCAATTAGACAAGAAAAAGTATCCCTATTGGCCTCACCAACCAATTGAGAAT TTATAA



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for BC032245 unedited  
 GGGTTCAAAATTTGTAATACGACTCACTCATAGGGCGGCCGGAATTCGCACCGCCGGGT  
 CCGTGAAGGATCCCAAAATGGCTGGGCGAAAACCTGCTCTAAAAACCATGACTGGGTAG  
 CTTTTGCAGAGATCATACCCAGAACCAAAAGGCCATTGCTAGTTCCTGAAATCCTGGA  
 ATGAGACCCTCACCTCCAGGTTGGCTGCTTTACCTGAGAATCCACCAGCTATCGACTGGG  
 CTTACTACAAGGCCAATGTGGCCAAGGCTGGCTTGGTGGATGACTTTGAGAAGAAGTTTA  
 ATGCGCTGAAGGTTCCCGTGCCAGAGGATAAATACTGCCAGGTGGATGCCGAAGAAA  
 AAGAAAGATGTGAAATCTTGTGCTGAGTGGGTGTCTCTCTCAAAGGCCAGGATTGTAGAAT  
 ATGAAAAAGAGATGGAGAAGATGAAGAACTTAATTCCATTTGATCAGATGACCATTGAGG  
 ACTTGAATGAAGCTTTCCAGAAACCAATTAGACAAGAAAAAGTATCCCTATTGGCCTC  
 ACCAACCAATTGAGAATTTATAAATTGAGTCCAGGAGGAAGCTCTGGCCCTTGATTAC  
 ACATTCTGGACATTAATAAATAATTATACAGTTCAAAAAAAAAAAAAAAAAAACTCGA  
 CTCTAGATTGCGGCCGCGGTCTAGCTGTTTCCTGAACAGATCCCGGTTGCATTCCCTG  
 TGACCCCTCCCGAGTGCCTCTCCTGGCCCTGGAAGTTCACCTTCAGTGCCACCAGCCTT  
 GTCCTATAAAAAAAGTNGCATATTTTGTCTGACTAAGTGTCCCTCTATACTATCGG  
 GTGAAGGGCGTGGATTGGACCAGGGCAATTTGAAAAACAATTTGGCCCGCGGGGTC  
 ATTGGGAACCACC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for BC032245 unedited  
 GGTACTACTATGNNACCGCGGCCCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTGA  
 ACTGTATAAATTATTTTTAATGTCCAGAATGTGTAATACAAGGGCCAGAGCTTCCTCC  
 TGGACTCAATTTTATAAATTCTCAATTGGTTGGTGAGGCCAATAGGGATACTTTTTCTTG  
 TCTAATTTGGTTTCTGGGAAAGCTTCATTCAAGTCTCAATGGTCATCTGATCAAATGGA  
 ATTAAGTCTTTCATCTTCCATCTCTTTTTCATATTCTACAATCCTGGCCTTTGAGAGA  
 GACACCCACTCAGCACAAGATTTACATCTTCTTTTTCTCGGCATCCACCTGGGCAGTA  
 TATTTATCCTCTGGCACGGGAACCTTCAGCGCATTAAACTTCTTCTCAAAGTCATCCACC  
 AAGCCAGCCTTGGCCACATTGGCCTTGTAGTAAGCCAGTCGATAGCTGGTGGATTCTCA  
 GGTAAAGCAGCCAACCTGGAGGTGAGGGTCTATTCCAGGATTTCAAGGAACTAGCAATG  
 GCCCTTTGGTTCTGGGTATGATCTCTGCAAAAGCTCCCCCATCAATGGTTTTTAGAGCA  
 AAGTTTTCCACCCCTTTGGGATCCTTCCCGACCCTGGCTGTGGCCAAATTCTCGGGC  
 CGCCCTTAGTGAGTCCTATTAATAAATTCTGACCGTTCATTAACAAGCTTTGGTTATT  
 TAAACCTCACCGGTCCCCCTCCCGCCTTTTTGGTTACCGGGGGGGTTTTTCCAAA  
 TTTTGGAAAGTCCCGTTGATTTTGGGGCCAAAAACCCCTTTGACGTCAAGGGGGGGG  
 AAAGTGGAAATCCCCTGGGTAAAACCCCTTTCCCCCCTTTGTGGGTCTGCCAAAA

**Restriction Sites:**

NotI-NotI

**ACCN:**

BC032245

**Insert Size:**

420 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:** [BC032245.1](#), [AAH32245.1](#)

**RefSeq Size:** 592 bp

**RefSeq ORF:** 414 bp

**Locus ID:** 10476

**Cytogenetics:** 17q25.1

**Protein Pathways:** Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

**Gene Summary:** Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. It is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, which comprises the proton channel. The F1 complex consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled in a ratio of 3 alpha, 3 beta, and a single representative of the other 3. The Fo seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene encodes the d subunit of the Fo complex. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. In addition, three pseudogenes are located on chromosomes 9, 12 and 15. [provided by RefSeq, Jun 2010]