

Product datasheet for **SC126967**

ATP5F1C (NM_005174) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP5F1C (NM_005174) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP5F1C
Synonyms:	ATP5C; ATP5C1; ATP5CL1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC126967 sequence for NM_005174 edited (data generated by NextGen Sequencing)

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ATGTTCTCTCGCGGGTGTGCTGGGCTGTGCGCCTGGACCTTGCAGCCGCAATGGATT
CAAGTTCGAAATATGGCAACTTTGAAAGATATCACCAGGAGACTAAAGTCCATCAAAAAC
ATCCAGAAAATTACCAAGTCTATGAAAATGGTAGCGGCAGCAAAATATGCCCGAGCTGAG
AGAGAGCTGAAACCAGCTCGAATATATGGATTGGGATCTTTAGCTCTGTATGAAAAGCT
GATATCAAGGGGCTGAAGACAAGAAGAAACACCTCCTTATTGGTGTGCTCCTCAGATCGA
GGACTGTGTGGTCTATTCATTCTCCATTGCTAAACAGATGAAAAGCGAGGTTGCTACA
CTAACAGCAGCTGGGAAAGAAGTTATGCTTGTGGAATTGGTGACAAAATCAGAGGCATA
CTTTATAGGACTCATTCTGACCAGTTTCTGGTGGCATTCAAAGAAGTGGGAAGAAAGCC
CCCCTTTTGGAGATGCGTCAGTCATTGCCCTTGAATTACTAAATCTGGATATGAATTT
GATGAAGGCTCCATCATCTTTAATAAATTCAGGTCTGTCATCTCCTATAAGACAGAAGAA
AAGCCCATCTTTCCCTTAATACCGTTGCAAGTGTGACAGCATGAGTATCTATGACGAT
ATTGATGTGACGTGCTGCAAAATTACCAAGAATACAATCTGGCCAACATCATCTACTAC
TCTCTGAAGGAGTCCACCACTAGTGAGCAGAGTGCCAGGATGACAGCCATGGACAATGCC
AGCAAGAATGCTTCTGAGATGATTGACAAATTGACATTGACATTCACCGTACCCGCCAA
GCTGTCATCACAAAAGAGTTGATTGAAATTATCTCTGGTGTGCGACTCTGTAA
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Clone variation with respect to NM_005174.2



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_005174 unedited CATTGTATACGACNACTATAGGGCGGCCGCGATTTCGGCACGAGGCCGACCTTCAGCAGG GCTGTGGCTACCATGTTCTCTCGCGCGGGTGTCTGCTGGGCTGTCCGGCTGGACCTTGCA CCGCAATGGATTCAAGTTCGAAATATGGCAACTTTGAAAGATATCACCAGGAGACTAAAG TCCATCAAAAACATCCAGAAAATTACCAAGTCTATGAAAATGGTAGCGGCAGCAAATAT GCCCGAGCTGAGAGAGAGCTGAAACCAGCTCGAATATATGGATTGGGATCTTTAGCTCTG TATGAAAAGCTGATATCAAGGGGCCTGAAGACAAGAAGAAACACCTCCTTATTGGTGTG TCCTCAGATCGAGGACTGTGTGGTCTATTTCATCCTCCATTGCTAAACAGCTGAAAAGC GAGGTTGCTACACTAACAGCAGCTGGGAAAGAAGTTATGCTTGTGGAATTGGTGACAAA ATCAGAGGCATACTTTATAGGACTCATTCTGACCAGTTTCTGGTGGCATTCAAAGAAGTG GGAAGAAAGCCCCCACTTTTGGAGATGCGTCAGTCATTGCCCTTGAATTACTAAATTCT GGATATGAATTTGATGAAGGCTCCATCATCTTTAATAAATTCAGGTCTGCATCTCTAT AAGACAGAGAAAAGCCCCATCTTCCCTTATACCNNGTGCAGTGTGACAGCATGAGTAT CTATGACGATATTGATGTGACGTGCTGCAAAAATACCAAGAATACATCTGGGCCACATCA TCTACTACTCTCTGGAGGAGTCCACCACTAGTGAGCAGAGTGCCAGATGACAGCCATGA CCATGCCAAGCAGAATGCTTCTGAGAGATTGACAATTGACATGACATTCACCGTACCCGC CAGCTGTATCACAAAGAGTGATGAT</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_005174 unedited CCGCAATCTAGAATCGAGTCTTTTTTTTTTTTTTTTTTTTTTTTAAAGCTGCTATTTTAAAGT AATTTACAAATATCTTGTGTCTTCAGTAATCAAATAATGGAGGAACGGTTTCTTCGGA CAAAGGCAGCAGTAAGCTAAAAACAAAATCAACTGGCTGAATTTTCTTCTTTACCTCTT GTCTGAGGATGGAACCTTGATTTTCATTAATCCAGAGCTGCAGCACCAGAGATAATTTCAA TCAACTCTTTTGTGATGACAGCTTGGCGGTACGTTGAATGTCAATGTCAATTTGTCAA TCATCTCAGAAGCATTCTTGCTGGCATTGTCCATGGCTGTGCATCCTGGCACTCTGCTCAC TAGTGGTGGACTCCTTCAGAGAGTAGTAGATGATGTTGGCCAGATTGATTCTTGGAAT TTTGCAGCACGTGAGCATCAATATCGTCATAGATACTCATGCTGTGAGCACTTGAACGG TATTAAGGGAAAAGATGGGCTTTTCTTCTGTCTTATAGGAGATGACAGACCTGAATTTAT TAAAGATGATGGAGCCTTCATCAATTCATATCCAGAATTTAGTAATTCAGGGCAATGA CTGACGCATCTCCAAAAGTGGGGGGCTTCTTCCCACTTCTCTGAATGCCACCAGAACT GTTCAGAATGAGTCTCTATAAAGTATGCCTCTGATTCTGTACCAATTCACAACAAGCATAA CTCTTTCCAGCTGCTGTTAGAGTAGCACCTCGCCTTTCATCTGTTTAGCATTGGAGGA ATGATTAGCACCCACAGTCTCGATCTGAGGACACACCATTAAGAGGTGTTTCTCCTGCC TTCAGCCCCTTGAATCAGCTCTTCATACGAGCTTAGATCCCATCCATTATTGAGCTGGT TCAGCTCTCTCAGCTCGGCATATTTGCTGCGCTACATTTATAAACTGGAATTCGGATG TTTGATGACTTAGCTCCGCAATCTN</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_005174
Insert Size:	1110 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_005174.2](#), [NP_005165.1](#)

RefSeq Size: 1125 bp

RefSeq ORF: 894 bp

Locus ID: 509

UniProt ID: [P36542](#)

Cytogenetics: 10p14

Domains: ATP-synt

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

Gene Summary: This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the gamma subunit of the catalytic core. Alternatively spliced transcript variants encoding different isoforms have been identified. This gene also has a pseudogene on chromosome 14. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) lacks a segment in the coding region compared to variant 1. The resulting isoform (H), also known as a heart type isoform, contains a shorter and distinct C-terminus compared to isoform L.