OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC127589

ATP5F1B (NM_001686) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP5F1B (NM_001686) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP5F1B
Synonyms:	ATP5B; ATPMB; ATPSB; HEL-S-271
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001686, the custom clone sequence may differ by one or more nucleotides

ATGTTGGGGTTTGTGGGTCGGGTGGCCGCTGCTCCGGCCTCCGGGGCCTTGCGGAGACTCACCCCTTCAG
CGTCGCTGCCCCCAGCTCAGCTCTTACTGCGGGCCGCTCCGACGGCGGTCCATCCTGTCAGGGACTATGC
GGCGCAAACATCTCCTTCGCCAAAAGCAGGCGCCGCCACCGGGCGCATCGTGGCGGTCATTGGCGCAGTG
GTGGACGTCCAGTTTGATGAGGGACTACCACCAATTCTAAATGCCCTGGAAGTGCAAGGCAGGGAGACCA
GACTGGTTTTGGAGGTGGCCCAGCATTTGGGTGAGAGCACAGTAAGGACTATTGCTATGGATGGTACAGA
AGGCTTGGTTAGAGGCCAGAAAGTACTGGATTCTGGTGCACCAATCAAAATTCCTGTTGGTCCTGAGACT
TTGGGCAGAATCATGAATGTCATTGGAGAACCTATTGATGAAAGAGGTCCCATCAAAACCAAACAATTTG
CTCCCATTCATGCTGAGGCTCCAGAGTTCATGGAAATGAGTGTTGAGCAGGAAATTCTGGTGACTGGTAT
CAAGGTTGTCGATCTGCTAGCTCCCTATGCCAAGGGTGGCAAAATTGGGCTTTTTGGTGGTGCTGGAGTT
GGCAAGACTGTACTGATCATGGAGTTAATCAACAATGTCGCCAAAGCCCATGGTGGTTACTCTGTGTTTG
CTGGTGTTGGTGAGAGGACCCGTGAAGGCAATGATTTATACCATGAAATGATTGAATCTGGTGTTATCAA
CTTAAAAGATGCCACCTCTAAGGTAGCGCTGGTATATGGTCAAATGAATGAACCACCTGGTGCTCGTGCC
CGGGTAGCTCTGACTGGGCTGACTGTGGCTGAATACTTCAGAGACCAAGAAGGTCAAGATGTACTGCTAT
TTATTGATAACATCTTTCGCTTCACCCAGGCTGGTTCAGAGGTGTCTGCATTATTGGGCCGAATCCCTTC
TGCTGTGGGCTATCAGCCTACCCTGGCCACTGACATGGGTACTATGCAGGAAAGAATTACCACTACCAAG
AAGGGATCTATCACCTCTGTACAGGCTATCTATGTGCCTGCTGATGACTTGACTGACCCTGCCCCTGCTA
CTACGTTTGCCCATTTGGATGCTACCACTGTACTGTCGCGTGCCATTGCTGAGCTGGGCATCTATCCAGC
TGTGGATCCTCTAGACTCCACCTCTCGTATCATGGATCCCAACATTGTTGGCAGTGAGCATTACGATGTT
GCCCGTGGGGTGCAAAAGATCCTGCAGGACTACAAATCCCTCCAGGATATCATTGCCATCCTGGGTATGG
ATGAACTTTCTGAGGAAGACAAGTTGACCGTGTCCCGTGCACGGAAAATACAGCGTTTCTTGTCTCAGCC
ATTCCAGGTTGCTGAGGTCTTCACAGGTCATATGGGGAAGCTGGTACCCCTGAAGGAGACCATCAAAGGA
TTCCAGCAGATTTTGGCAGGTGAATATGACCATCTCCCAGAACAGGCCTTCTATATGGTGGGACCCATTG
AAGAAGCTGTGGCAAAAGCTGATAAGCTGGCTGAAGAGCATTCATCGTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001686 unedited
CGCGAATTCGGCACCAGCTACGCCATGTTGGGGTTTGTGGGTCGGGTGGCCGCTGCTCCG
GCCTCCGGGGCCTTGCGGAGACTCACCCCTTCAGCGTCGCTGCCCCCAGCTCAGCTCTTA
CTGCGGGCCGCTCCGACGGCGGTCCATCCTGTCAGGGACTATGCGGCGCAAACATCTCCT
TCGCCAAAAGCAGGCGCCGCCACCGGGCGCATCGTGGCGGTCATTGGCGCAGTGGTGGAC
GTCCAGTTTGATGAGGGACTACCACCAATTCTAAATGCCCTGGAAGTGCAAGGCAGGGAG
ACCAGACTGGTTTTGGAGGTGGCCCAGCATTTGGGTGAGAGCACAGTAAGGACTATTGCT
ATGGATGGTACAGAAGGCTTGGTTAGAGGCCAGAAAGTACTGGATTCTGGTGCACCAATC
AAAATTCCTGTTGGTCCTGAGACTTTGGGCAGAATCATGAATGTCATTGGAGAACCTATT
GATGAAAGAGGTCCCATCAAAACCAAACAATTTGCTCCCATTCATGCTGAGGCTCCAGAG
TTCATGGAAATGAGTGTTGAGCAGGAAATTCTGGTGACTGGTATCAAGGTTGTCGATCTG
CTAGCTCCCTATGCCAAGGGTGGNCAAATTGGGCTNTTTGGTGGTGCTGGAGTTGGCAAG
ACTGTACTGATCATGGAGTTAATCAAACATGTCGCCAAAGCCCATGGTGGTTACTCTGTG
TTTGCTGGTNGTNGGTGAAAGGACCCGTGAN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001686 unedited
ATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGAGGGGTGTACATT
TTATTGGAAACCTTAAATACTGTTCAGAAAGAATATATCTTCAATCAAGGCTCTTGTGCA
GCCTACACAGAAAAATGAAGCTTTTTGGGTTAGGGGCAAGGAGAGAGACAGTACAGAGGA
CAAAGACCCCTCACGATGAATGCTCTTCAGCCAGCTTATCAGCTTTTGCCACAGCTTCTT
CAATGGGTCCCACCATATAGAAGGCCTGTTCTGGGAGATGGTCATATTCACCTGCCAAAA
TCTGCTGGAATCCTTTGATGGTCTCCTTCAGGGGTACCAGCTTCCCCATATGACCTGTGA
AGACCTCAGCAACCTGGAATGGCTGAGACAAGAAACGCTGTATTTTCCGTGCACGGGACA
CGGTCAACTTGTCTTCCTCAGAAAGTTCATCCATACCCAGGATGGCAATGATATCCTGGA
GGGATTTGTAGTCCTGCAGGATCTTTTGCACCCCACGGGCAACATCGTAATGCTCACTGC
CAACAATGTTGGGATCCATGATACGAGAGGTGGAGTCTAGAGGATCCACAGCTGGATAGA
TGCCCAGCTCAGCAATGGCACGCGACAGTACAGTGGTAGCATCCAAATGGGCAAACGTAG
TAGCAGGGGCAGGGTCAGTCAAGTCATCAGCAGGCACATAGATAGCCTGTACAGAGGTGA
TAGATCCCTTCTTGGTAGTGGTAATTCTTTCCTGCATAGTCCCCATGTCAGTGGCCAGGG
TAAGCTGATACCCCCCACATAAGGAATTCGGCCCATAATGCANACACCTCTGAACCAGCC
TGGGTGAACCGCAGCAGCCTTTATTTAACCCCCCCCTTCTCGACCCTTTTGGTCTTGAAG
TTTTCACCCCATCAGCCCATACAGATTACCGGCAACAGCCCAGGGGTTATTAATTGACCC
CACAACGCTCCCTCAAGGGCATTTCTAAGTGAAACCCA

Restriction Sites: NotI-NotI

ACCN: NM_001686

Insert Size: 1750 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

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_001686.3, NP_001677.2

RefSeq Size:	1857 bp
RefSeq ORF:	1590 bp
Locus ID:	506
UniProt ID:	P06576
Cytogenetics:	12q13.3
Domains:	ATP-synt_ab, ATP-synt_ab_C, AAA, ATP-synt_ab_N
Protein Families:	Druggable Genome
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 beta subunit of the catalytic core. [provided by RefSeq, Jul 2008]