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 SC108460

ATP5MC3 (NM_001689) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP5MC3 (NM_001689) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP5MC3
Synonyms:	ATP5G3; P3
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108460 sequence for NM_001689 edited (data generated by NextGen Sequencing) ATGTTCGCCTGCGCCAAGCTCGCCTGCACCCCCTCTCTGATCCGAGCTGGATCCAGAGTT GCATACAGACCAATTTCTGCATCAGTGTTATCTCGACCAGAGGCTAGTAGGACTGGAGAG GGCTCTACGGTATTTAATGGGGCCCAGAATGGTGTGTCTCAGCTAATCCAAAGGGAGTTT CAGACCAGTGCAATCAGCAGAGACATTGATACTGCTGCCAAATTTATTGGTGCAGGTGCT GCAACAGTAGGAGTGGCTGGTTCTGGTGCTGGTATTGGAACAGTCTTTGGCAGCCTTATC ATTGGTTATGCCAGAAACCCTTCGCTGAAGCAGCAGCTGTTCTCATATGCTATCCTGGGA TTTGCCTTGTCTGAAGCTATGGGTCTCTTTTGTTTGATGGTTGCTTTCTTGATTTTGTTT GCCATGTAA Clone variation with respect to NM_001689.4

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001689 unedited
TATACGACTCACTATAGGGCGGCCGCGAATTCGCACGAGGCCTGGGAAGAGAGGAAGCGG
GAGAGGAGCCCACGTCGCCTGTCACCCAATATCTCCAGCCGCGCAGTCCCGAAGAGTGTA
AGATGTTCGCCTGCGCCAAGCTCGCCTGCACCCCCTCTCTGATCCGAGCTGGATCCAGAG
TTGCATACAGACCAATTTCTGCATCAGTGTTATCTCGACCAGAGGCTAGTAGGACTGGAG
AGGGCTCTACGGTATTTAATGGGGCCCAGAATGGTGTGTCTCAGCTAATCCAAAGGGAGT
TTCAGACCAGTGCAATCAGCAGAGACATTGATACTGCTGCCAAATTTATTGGTGCAGGTG
CTGCAACAGTAGGAGTGGCTGGTTCTGGTGCTGGTATTGGAACAGTCTTTGGCAGCCTTA
TCATTGGTTATGCCAGAAACCCTTCGCTGAAGCAGCAGCTGTTCTCATATGCTATCCTGG
GATTTGCCTTGTCTGAAGCTATGGGTCTCTTTTGTTTGATGGTTGCTTTCTTGATTTTGT
TTGCCATGTAACAAATTACTGCTTGACATGTTGGCATTCATATTAATTACGGATGTAATT
CTGTGTATCTTACTGTGACTCCGAAACTGTAGTATTGGTGTCATGGGAATGTACGTTATT
TCCAAAGTCATTTCATTAAAGATGAAAACTTTAAAAAAAAAAAAAAAAAAACTCGACTCTA
GATGGCGGGCCGCGGTCATAGCTTGTTTCTGAACAGATCCCGGTGGCATCCCTGTGACCC
CTNCCCAGTGCTCTCCTGGCCCTGGAGTTGCCACTCATGCCCACCAGCCTTGTCTATAAA
TTAGTGCATCTTTTGGCTGACTAGGGTCCTCATAAATATGTGGGGGGGGGGGGGGTGGNT
TANAAAAGGGAAATTTGGAAAAAACCTGAGGCCCCGGGGGCTATTGGACCAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001689 unedited
CCAGGCCCGGTAAAGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATCTGTTCAGGA
AACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTAAAGTT
TTCATCTTTAATGAAATGACTTTGGAAATAACGTACATTCCCATGACACCAATACTACAG
TTTTCGGAGTCACAGTAAGATACACAGAATTACATCCGTAATTAATATGAATGCCAACAT
GTCAAGCAGTAATTTGTTACATGGCAAACAAAATCAAGAAAGCAACCATCAAACAAAAGA
GACCCATAGCTTCAGACAAGGCAAATCCCAGGATAGCATATGAGAACAGCTGCTGCTTCA
GCGAAGGGTTTCTGGCATAACCAATGATAAGGCTGCCAAAGACTGTTCCAATACCAGCAC
CAGAACCAGCCACTCCTACTGTTGCAGCACCTGCACCAATAAATTTGGCAGCAGTATCAA
TGTCTCTGCTGATTGCACTGGTCTGAAACTCCCTTTGGATTAGCTGAGACACACCATTCT
GGGCCCCATTAAATACCGTAGAGCCCTCTCCAGTCCTACTAGCCTCTGGTCGAGATAACA
CTGATGCAGAAATTGGTCTGTATGCAACTCTGGATCCAGCTCGGATCAGAGAGGGGGTGC
AGGCGAGCTTGGCGCAGGCGAACATCTTACACTCTTCGGNACTGCGCGGCTGGAGATATT
GNGTGACAGGCGACGTGGGCTCCTCTCCCGCTTCCTCTCTTTCCAGNCCTNNGTGCGAAT
CGCGGCCGNCCTATAGNGAGTCGTATTACAAAATTCTGACGGNTCACTAAACGAGCTCTG
CTATATAGACCTCCCACGTACACGCTACCGCCATTTGCGTACGGGGGCGGGGTTATACGA
CTTNTGGAAGTCCGTGATTTTGTGCCAACAACCCCATGCGCAGGGGGGGAGACTGAATTC
CGGAGTCACGCTCCCGCCCTTGGGTCTGCAACGCTCCATGAAACGG

Restriction Sites: NotI-NotI

ACCN: NM_001689

Insert Size: 700 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_001689.2, NP_001680.1
RefSeq Size:	997 bp
RefSeq ORF:	429 bp
Locus ID:	518
UniProt ID:	P48201
Cytogenetics:	2q31.1
Domains:	ATP-synt_C
Protein Families:	Transmembrane
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 seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding different proteins have been identified. [provided by RefSeq, Jun 2010] Transcript Variant: This variant (2) has an additional intron sequence in its 3' end, compared to variant 4. This difference results in a protein (isoform A) with a longer C-terminus, compared to isoform B. Variants 2 and 3 encode the same protein. 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.