

Product datasheet for **SC115672**

ABCB8 (NM_007188) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB8 (NM_007188) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCB8
Synonyms:	EST328128; M-ABC1; MABC1; MITOSUR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC115672 sequence for NM_007188 edited (data generated by NextGen Sequencing)

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ATGCTGGTGCATTTATTTTCGGGTCGGGATTCGGGGTGGCCATTCCCAGGCAGGCTGCTA
CCGCCCCCTCCGCTTCCAGACATTCTCAGCTGTCAGGACTCTGATGGCTACCGCAGCTCC
TCCCTCCTCCGGGCCGTGGCCACCTGCGGTCCAGCTCTGGGCCACCTCCCTCGAGCC
CCCCTAGCTCCCAGATGGAGCCCCTCTGCCTGGTGTGGGTTGGGGGAGCCCTGTAGGC
CCCATGGTACTGAGTAAGCATCCCCACCTCTGCCTTGTGGCCCTGTGTAGGCAGAAGAG
GCCCTCCTGCCAGTCCACACCCCATGTCGTGGGGTCTCGCTTTAACTGGAAGCTCTTC
TGGCAGTTTCTGCACCCCACTGCTGGTCTGGGGTAGCCGTCGTGCTGGCCTTGGGT
GCGGCACTCGTGAATGTACAGATCCCCCTGCTCCTGGGCCAGCTGGTAGAGGTCTGTGGCC
AAGTACACAAGGGACCACGTAGGGAGTTTCATGACTGAGTCCCAGAATCTCAGCACCCAC
CTGCTTATCCTCTATGGTGTCCAGGGACTGCTGACCTTCGGGTACCTGGTGTCTGTGCC
CACGTTGGCGAGCGCATGGCTGTGGACATGCGGAGGGCCCTTTCAGCTCCCTGTCCGA
CAAGACATCACCTTCTTTGACGCCAATAAGACAGGGCAGCTGGTGTAGCCGCTTGACAAT
GACGTGCAGGAGTTTAAGTCATCCTTCAAGCTTGTATCTCCAGGGGCTGCGAAGCTGC
ACCCAGGTGGCAGGCTGCCTGGTGTCCCTGTCCATGCTGTGACACGCCTCACGCTGCTG
CTGATGGTGGCCACACCAGCCCTGATGGGAGTGGGCACCCTGATGGGCTCAGGCCTCCGA
AAATTGTCTCGCCAGTGTGAGGAGCAGATCGCCAGGGCAATGGGCGTAGCAGACGAGGCC
CTGGGCAATGTGCGGACTGTGCGAGCCTTCGCCATGGAGCAACGGGAAGAGGAGCGCTAT
GGGGCAGAGCTGGAAGCCTGCCGCTGCCGGGCAGAGGAGCTGGGCCGCGGCATCGCCTTG
TTCCAAGGGCTTCCAACATCGCCTTCAACTGCATGGTCTTGGGTACCCTATTTATTGGG
GGCTCCCTTGTGGCCGGACAGCAGCTGACAGGGGGAGACCTCATGTCTTCTCTGGTGGCC
TCCCAGACAGTGCAAAGGTCCATGGCCAACTCTCTGTCTGTTTGGGCAGGTGGTCCGG
GGGCTGAGTGCAGGTGCCCGGGTCTTTGAGTACATGGCCCTGAACCCCTGCATCCCACTG
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TCCCTGCTGGAGCGCTTCTACGACCCACGGCAGGCGTGGTGTGCTGGATGGGCGGGAC
CTGCGCACCTTGACCCCTCCTGGCTCCGGGGCCAGGTTGTGGCTTTCATCAGCCAGGAG
CCCGTCTGTTTGGGACGACCATCATGGAAAACATCCGCTTGGGAAGCTGGAAGCTTCC
GATGAAGAGGTGTACACAGCCGCCCGGGAAGCGAATGCTCACGAGTTCATCACCAGCTTC
CCCGAGGGCTACAACACGGTCTGTCGGTGAACGGGGCACTACCCTGTCTGGGGGCCAGAAG
CAGCGCCTGGCCATCGCCCGAGCCCTTATCAAGCAGCCCACGGTGTGATACTGGATGAA
GCTACCAGCGCGCTGGATGCAGAGTCCGAGCGGGTGTACAGGAGGCCCTGGACCGGGCC
AGTGCAGGCCGCACGGTGTGTAATTGCCACCGGCTCAGCACTGTCCGTGGGGCCAC
TGCATTGTCGTATGGCCGATGGCCGTGTCTGGGAGGCTGGGACACATGAAGAGCTCCTG
AAGAAAGCGGGCTATACGCCGAGCTCATCCGGAGGCAGGCCCTGGATGCCCCGAGGACA
GCGGCCCAACGCCAAAAAGCCAGAAGGCCCAAGGAGCCACCAGCACAAGTCCTGA
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Clone variation with respect to NM_007188.3
984 t=>a

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_007188 unedited
 NGGGTTCAAATTTGTATACGACTCATATAGGCGGCCGCGNAATTCGCACGAGGCCAACAT
 AGAGCCCTCAGTGGGATGAGGGTAAACTGCTATTGCCGGCGGCTCCTGTTTTACCGCGT
 CAGCATGCTGGTGCATTTATTTTCGGGTCCGGATTCGGGGTGGCCATTCCCAGGCAGGCT
 GCTACCGCCCTCCGCTTCCAGACATTCAGCTGTCAGTACTCTGATGGCTACCGCAG
 CTCTCCCTCCTCCGGGCCGTGGCCACCTGCCGTCCCAGCTCTGGGCCACCTCCCTCG
 AGCCCCCTAGCTCCAGATGGAGCCCCCTGCTGCTGGTGGTGGGGGAGCCCTGCT
 AGGCCCCATGGTACTGAGTAAGCATCCCCACCTCTGCCTTGTGGCCCTGTGTGAGGCAGA
 AGAGGCCCTCCTGCCAGCTCCACACCCCATGTCGTGGGGTCTCGCTTTAACTGGAAGCT
 CTTCTGGCAGTTTCTGCACCCCCACCTGCTGGTCTGGGGTAGCCGTCGTGCTGGCCTT
 GGGTGGCGCACTCGTGAATGTACAGATCCCCCTGCTCCTGGCCAGCTGGTAGAGGTCGT
 GGCCAAGTACACAAGGGACCACGTAGGGAGTTTCATGACTGAGTCCCAGAATCTCAGCAC
 CCACCTGCTTATCCTCTATGGTGTCCAGGGACTGCTGACCTTCGGGTACCTGGTGTGCT
 GTCCACGTTGGCGAGCGCATGGCTGTGGACATGCGGAGGGCCCTTTCAGCTCCCTGCT
 CCGACNAGACATCACCTCTTTGACGCCAATAAGACAGGGCAGCTGGTGAGCCGCTTGAC
 AACTGACGTGCANGAGTTTTAAGTCATCCTTCAAGCTTGCATCTCCCAGGGNCTGCNGA
 ACTGCACCCAGNT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_007188 unedited
 CACGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTCTGGTGGGAGGGTAGGCAGCCGG
 CAGGACTGGGGAGGGGAGGGAGGGATTGGCCTCCCTGCCAGCTGCTCGGTCCCAGCTTT
 ATTGTGAGCAGGAGCAGTCGCATCGACTCTACACATGCTGAGTCTCCTGGGGGCTCATT
 TCTTATTAGGCTCTTCCAGGCTGAGTCCCATCCCTAACACTGATGCTTGGTAGTGACCAT
 CCTTAGGGGGTCTTTTCATGACTTGTGCTGCTGGTACTGGGGTCTTCTGGTTTTTCGG
 CTCGGTGGGGTTCGATGTCTTGGGGTATTCTGGGCTGTCTCCGGATGATCCCAGCGCA
 CATCCCGCTCTTTCAGGCAGCTCCTTTTGTGCTTTATCTCTTTCACCTCGGTCTTTGT
 CTTTGTAAACATTGATTTTGGTTTTTTCGCTCCCTGCTTGTATTCTCTGGTTACTTCAT
 TCTTCACTCCATCGGTTCCGCTCTGCTACTGTATCTTGTCTTTCGCTTATATTTCCCTT
 CTCTTTTCTTCTCCTCTCTGGTTTCTTCTTACTTACCATTCTCCTCTCTCTCCTCCC
 ACTGGCCTCTTCTCCGCTATTTTTCTCCCTCCTCCCTCCTCTTTGTTTTCTCCCTTC
 TCTTCTTTCTTCCCACATCCTACTACTTCGCACCCATCTCTTCTGTTTTTTTTAGTTC
 TTTCTCCCTCTTCTCTCTTTCCCCCTCTCCTCCCTTTTCTCTCTCTCTGTTTTCTT
 TTATTTCTTTCTCATTACTTACTGCTTCTCCTCACTTTCGATATCATTACTTTTCTA
 CTCCCCACTTTCTGTCTTATCTACTCTCCTTCCCTTCTACTTACTTGTACCTTTT
 ACTTCCCCTTTCTCCCCTTACCCCTTCTTCTTCTCTCTCCTACATTCTCTCTCCT
 CTCACTGCTCCTTTTTAACTCTCTCTCTTTTCCCCTTTTTTTTTCTTCTTCTTT
 ATACCAGCCCCCTATCNCCACTCACTCTCCTTCTACGCAN

Restriction Sites:

NotI-NotI

ACCN:

NM_007188

Insert Size:

2560 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_007188.2](#), [NP_009119.1](#)

RefSeq Size: 2439 bp

RefSeq ORF: 2157 bp

Locus ID: 11194

UniProt ID: [Q9NUT2](#)

Cytogenetics: 7q36.1

Domains: ABC_membrane, ABC_tran, AAA

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

Gene Summary:

This nuclear gene encodes a multi-pass membrane protein that is targeted to the mitochondrial inner membrane. The encoded protein is an ATP-dependent transporter that may mediate the passage of organic and inorganic molecules out of the mitochondria. Loss of function of the related gene in mouse results in a disruption of iron homeostasis between the mitochondria and cytosol. Alternative splicing results in multiple transcript variants.

[provided by RefSeq, Aug 2013]

Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. The encoded isoform (b) is shorter than 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.