

Product datasheet for **SC127973**

ABCB7 (NM_004299) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB7 (NM_004299) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCB7
Synonyms:	ABC7; ASAT; Atm1p; EST140535
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_004299 edited
 ATGGCGCTGCTCGCGATGCATTCTTGGCGCTGGGCGGCCGCGCGGCTGCTTTCGAAAAG
 CGCCGGCACTCCGCGATTCTGATCCGGCCTTTAGTCTCTGTTAGCGGCTCAGGTCGCCAG
 TGGAGGCCACATCAACTCGGCGCCTTGGGAACCGCTCGAGCCTACCAGCAGATCCAGAG
 TCATTA AAAAGTATCACATGGCAGAGATTGGGAAAAGGCAATTCAGGACAGTTCTTAGAT
 GCTGCAAAGGCTCTCCAGGTATGGCCACTGATAGAAAAGAGGACATGTTGGCATGGTCAT
 GCAGGAGGAGACTCCACACAGACCCAAAAGAAGGGTTAAAAGATGTTGATACTCGGAAA
 ATCATAAAAGCAATGCTTCTTATGTGTGGCCAAAGACAGGCCAGATCTACGAGCTAGA
 GTTGCCATTTTCGCTGGGATTTTTGGGTGGTGCAAAGGCCATGAATATTGTGGTCCCTTC
 ATGTTTAAATATGCTGTAGACAGCCTCAACCAGATGTCGGGAAACATGCTGAACCTGAGT
 GATGCACCAAATACAGTTGCAACCATGGCAACAGCAGTTCTGATTGGCTATGGTGTATCA
 AGAGCTGGAGCTGCTTTTTTAAACGAAGTTCGAAATGCAGTATTTGGCAAGGTAGCCAG
 AATTCAATCCGAAGAATAGCCAAAATGTCTTCTCCATCTTCACAACCTGGATCTGGGT
 TTTACCTGAGCAGACAGACGGGAGCTTATCTAAGGCTATTGACAGAGGAACAAGGGT
 ATCAGTTTTGCTGAGTCTTTGGTATTTAATCTTCTCCATCATGTTTGAAGTGATG
 CTTGTCAAGTGGTGTATTACAAAATGCGGTGCCAGTTTGGCTTGGTAACCTTGGAA
 ACCTTGGTACATACACAGCATTACAGTTGCAGTCACACGGTGGAGAAGTAGATTTAGA
 ATAGAAATGAACAAAGCAGATAATGATGCAGGTAATGCTGCTATAGACTCACTGCTGAAT
 TATGAACTGTGAAGTATTTAATAATGAAAGATGAAGCACAGAGATATGATGGATTT
 TTGAAGACGTATGAGACTGCTTCATTGAAAAGTACCTCTACTCTGGCTATGCTGAACTTT
 GGTCAAAGTGCTATTTTCAAGTGTGCGTTTAAACAGCTATAATGGTGTCTGCCAGTCAGGGA
 ATTTGTGGCAGGTACCTTACTGTTGGAGATCTAGTAATGGTGAATGGACTGCTTTTTTCAG
 CTTTCATTACCCCTGAACCTTTCTGGAACTGTATATAGAGAGACTAGACAAGCACTCATA
 GATATGAACACCTTGTTTACTCTACTCAAGGTAGACACCCAAATTAAGACAAAAGTGATG
 GCATCTCCCTTCAGATCACACCACAGACAGCTACCGTGGCCTTTGATAATGTGCATTTT
 GAATACATTGAGGGCCAGAAAAGTCTTAGTGGAATATCCTTTGAAGTCCCTGCAGGAAAAG
 AAAGTGGCCATTGTAGGAGGTAGTGGGTCAGGGAAAAGCACAAATAGTGAGGCTATTATTT
 CGCTTCTATGAGCCTCAAAGGGTAGCATTATCTTGCTGGTCAAATATACAAGATGTG
 AGCCTGAAAAGCCTTCGGAGGGCAGTGGGAGTGGTACCTCAGGATGCTGCTCCTTCCAT
 AATACTATTTATTACAACCTCTTATATGAAAACATCAGTGCTTCCCTGAGGAAGTGAT
 GCAGTGGCAAAATTAGCTGGACTTCATGATGCAATTCTTGAATGCCACATGGATATGAC
 ACCCAAGTAGGGGAACGAGGACTCAAGCTTTCAGGAGGAGAAAAGCAAAGTAGCAATT
 GCAAGAGCCATTTGAAGGACCCCCAGTCATACTCTATGATGAAGCTACTTCATCGTTA
 GATTCCGATTACTGAAGAGACTATTCTTGGTGCCATGAAGGATGTGGTCAAACACAGAAGT
 TCTATTTTCATTGCACACAGATTGTCAACAGTGGTTGATGCAGATGAAATCATTGTCTTG
 GATCAGGGTAAGGTAGCCGAACGTGGTACCCACCATGGTTTGGCTTGCTAACCCCTCATAGT
 ATCTATTCAGAAATGTGGCATACACAGACAGCCGTGTGCAGAACCATGATAACCCCAA
 TGGGAAGCAAAGAAAAGAAAATATATCCAAGAGGAGGAAAAGAAAAGAACTACAAGAAGAA
 ATTTGCAATAGTGTGAAAGGCTGTGGAACTGTTCTGTGCTAA

Restriction Sites: Please inquire

ACCN: NM_004299

Insert Size: 2300 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](#)

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_004299.3](#), [NP_004290.2](#)

RefSeq Size: 2404 bp

RefSeq ORF: 2262 bp

Locus ID: 22

UniProt ID: [O75027](#)

Cytogenetics: Xq13.3

Domains: ABC_membrane, ABC_tran, AAA

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

Gene Summary:

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance as well as antigen presentation. This gene encodes a half-transporter involved in the transport of heme from the mitochondria to the cytosol. With iron/sulfur cluster precursors as its substrates, this protein may play a role in metal homeostasis. Mutations in this gene have been associated with mitochondrial iron accumulation and isodicentric (X)(q13) and sideroblastic anemia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2012]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). 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.