

Product datasheet for **RC234835**

ABCB7 (NM_001271696) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB7 (NM_001271696) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ABCB7
Synonyms:	ABC7; ASAT; Atm1p; EST140535
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC234835 representing NM_001271696
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCTGCTCGCGATGCATTCTTGGCGCTGGCGGCCGGCGCGGCTGCTTTTCGAAAAGCGCCGGCACT
 CCGCGATTCTGATCCGGCCTTTAGTCTCTGTTAGCGGCTCAGGTCGCGAGTGGAGGCCACATCAACTCGG
 CGCCTTGGGAACCGCTCGAGCCTACCAGATTCCAGAGTCATTAAGAAAGTATCACATGGCAGAGATTGGGA
 AAAGGCAATTCAGGACAGTTCTTAGATGCTGCAAAGGCTCTCCAGGTATGGCCACTGATAGAAAAGAGGA
 CATGTTGGCATGGTCATGCAGGAGGAGGACTCCACACAGACCCAAAAGAAGGGTTAAAAGATGTTGATAC
 TCGGAAAATCATAAAAGCAATGCTTTCTTATGTGTGGCCAAAGACAGGCCAGATCTACGAGCTAGAGTT
 GCCATTCGCTGGGATTTTTGGGTGGTCAAAGGCCATGAATATTGTGGTTCCTTCATGTTAAATATG
 CTGTAGACAGCCTCAACCAGATGTCGGGAAACATGCTGAACCTGAGTGATGCACCAAATACAGTTGCAAC
 CATGGCAACAGCAGTTCTGATTGGCTATGGTGTATCAAGAGCTGGAGCTGCTTTTTTAACGAAGTTCGA
 AATGCAGTATTTGGCAAGGTAGCCAGAATTCATCCGAAGAATAGCCAAAATGTCTTTCTCCATCTTC
 ACAACCTGGATCTGGGTTTTACCTGAGCAGACAGACGGGAGCTTTATCTAAGGCTATTGACAGAGGAAC
 AAGGGGTATCAGTTTTGTCTGAGTGCTTTGGTATTTAATCTTCTCCCATCATGTTGAAGTGATGCTT
 GTCAGTGGTGTGTTGTATTACAAATGCGGTGCCAGTTTGCTTTGGTAACCCTTGGAACACTTGGTACAT
 ACACAGCATTACAGTTGCAGTCACACGGTGGAGAAGTATGAAATAGAAATGAACAAAGCAGATAA
 TGATGCAGGTAATGCTGCTATAGACTCACTGCTGAATTAAGAACTGTGAAGTATTTAATAATGAAAGA
 TATGAAGCACAGAGATATGATGGATTTTGAAGACGTATGAGACTGCTTCATTGAAAAGTACCTCTACTC
 TGGCTATGCTGAACTTTGGTCAAAGTCTATTTTCAGTGTGCGTTAACAGCTATAATGGTCTCGCCAG
 TCAGGGAATTGTGGCAGGTACCCTTACTGTTGGAGATCTAGTAATGGTGAATGGACTGCTTTTTTCAGCTT
 TCATTACCCTGAACTTTCTGGGAACTGTATATAGAGAGACTAGACAAGCACTCATAGATATGAACACCT
 TGTTTACTCTACTCAAGGTAGACACCCAAATTAAGACAAAGTATGGCATCTCCCTTCAGATCACACC
 ACAGACAGCTACCGTGGCCTTTGATAATGTGCATTTTGAATACATTGAGGGCCAGAAAGTCTTAGTGGA
 ATATCCTTTGAAGTCCCTGCAGGAAAGAAAGTGGCCATTGTAGGAGGTAGTGGGTCAGGGAAAAGCACAA
 TAGTGAGGCTATTATTTGCTTCTATGAGCCTCAAAGGGTAGCATTTATCTTGTGGTCAAATATACA
 AGATGTGAGCCTGAAAGCCTTCGGAGGGCAGTGGGAGTGGTACCTCAGGATGCTGTCCTCTCCATAAT
 ACTATTTATTACAACCTTTATATGGAACATCAGTGCTTACCTGAGGAAGTATGCAGTGGCAAAT
 TAGCTGGACTTCATGATGCAATTCCTCGAATGCCACATGGATATGACACCAAGTAGGGGAAACGAGGACT
 CAAGCTTTCAGGAGGAGAAAAGCAAAGAGTAGCAATTGCAAGAGCCATTTTGAAGGACCCCCAGTCATA
 CTCTATGATGAAGCTACTTCATCGTTAGATTCCGATTACTGAAGAGACTATTCTTGGTGCCATGAAGGATG
 TGGTCAAACACAGAACTTCTATTTTCATTGCACACAGATTGTCAACAGTGGTTGATGCAGATGAAATCAT
 TGTCTTGGATCAGGGTAAGGTAGCCGAACGTGGTACCCACCATGGTTTGTCTGCTAACCCCATAGTATC
 TATTCAGAAATGTGGCATAACACAGAGCAGCCGTGTGCAGAACCATGATAACCCCAAATGGGAAGCAAAGA
 AAGAAAATATATCCAAGAGGAGGAAAGAAAGAAACTACAAGAAGAAATGTCAATAGTGTGAAAGGCTG
 TGGAAACTGTTCTGTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234835 representing NM_001271696
Red=Cloning site Green=Tags(s)

MALLAMHSWRWAAAAAFEKRRHSAILIRPLVSVSGSGPQWRPHQLGALGTARAYQIPESLKSITWQRLG
 KGNSSGQFLDAAKALQVWPLIEKRTCWHGHAGGGLHTDPKEGLKDVDTRKIIKAMLSYVWPDRPDLRARV
 AISLGLGAKAMNIVPFMFKYAVDSL NQMSGNMLNLSDAPNTVATMATAVLIGYVSRAGAAFFNEVR
 NAVFGKVAQNSIRRIAKNVFLHLHNLDLGFHLSRQTGALSKAIDRGTRGISFVLSALVFNLLPIMFEVML
 VSGVLYYKCGAQFALVTLGLTYTAFTVAVTRWRTRFRRIEMNKADNDAGNAAIDSLNLYETVKYFNNER
 YEAQRYDGLKTYETASLKSTSTLAMLNFGQSAIFSVGLTAIMVLASQGI VAGTLTVGDLVMVNGLLFQL
 SLPLNFLGTVYRETRQALIDMNTLFTLLKVDQIKDKVMASPLQITPQTATVAFD NVHFYIEGQKVLSG
 ISFEVPAGKKVAIVGGSGSGKSTIVRLLFRFYEPQKGS IYLAGQNIQDVSLESLRRAVGVVQDAVLFHN
 TIYYNLLYGNISASPEEVYAVAKLAGLHDAILRMPHG YDTQVGERGLKLSGGEKQRVAIARAILKDPPIV
 LYDEATSSLDSITEETILGAMKDVVKHRTSIFIAHRLSTV VDADEIIVLDQGKVAERGTHHGLLANPHSI
 YSEMWHTQSSRVQNHDPKWEAKKENISKEEERKKLQEEIVNSVKGCGNCSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001271696

ORF Size: 2256 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001271696.3](#)

RefSeq Size: 2525 bp

RefSeq ORF: 2259 bp

Locus ID: 22

UniProt ID: [O75027](#)

Cytogenetics: Xq13.3

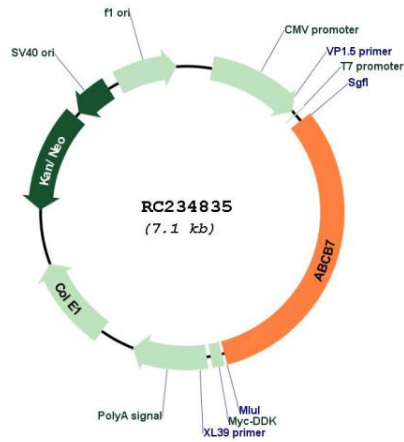
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

MW: 83.1 kDa

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]

Product images:



Circular map for RC234835