

Product datasheet for **RC234781**

ABCB7 (NM_001271698) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB7 (NM_001271698) 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:

>RC234781 representing NM_001271698
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGCTGCTCGCGATGCATTCTTGGCGCTGGCGGCCGGCGCGGCTGCTTTCCAAAAGCGCCGGCACT
CCGCGATTCTGATCCGGCCTTTAGTCTCTGTTAGCGGCTCAGGTCGCGAGTGGAGGCCACATCAACTCGG
CGCCTTGGGAACCGCTCGAGCCTACCAGGCTCTCCAGGTATGGCCACTGATAGAAAAGAGGACATGTTGG
CATGGTCATGCAGGAGGAGGACTCCACACAGACCCAAAAGAAGGGTTAAAAGATGTTGATACTCGGAAAA
TCATAAAAGCAATGCTTTCTTATGTGTGGCCAAAGACAGGCCAGATCTACGAGCTAGAGTTGCCATTTT
GCTGGGATTTTTGGTGGTGCAAAGGCCATGAATATTGTGGTTCCTTCATGTTTAAATATGCTGTAGAC
AGCCTCAACCAGATGTCGGGAAACATGCTGAACCTGAGTATGCACCAAATACAGTTGCAACCATGGCAA
CAGCAGTCTGATTGGCTATGGTGTATCAAGAGCTGGAGCTGCTTTTTTAAACGAAGTTCGAAATGCAGT
ATTTGGCAAGGTAGCCCAGAATCAATCCGAAGAATAGCCAAAATGTCTTCTCCATCTTCACAACCTG
GATCTGGGTTTTACCTGAGCAGACAGACGGGAGCTTTATCTAAGGCTATTGACAGAGGAAACAAGGGGTA
TCAGTTTTGTCCTGAGTGCTTTGGTATTTAATCTTCTCCCATCATGTTTGAAGTGATGCTTGTCACTGG
TGTTTTGTATTACAAATGCGGTGCCAGTTTGCTTTGGTAACCTTGGAAACACTGGTACATACACAGCA
TTCACAGTTGCAGTCACACGGTGGAGAAGTATGAAATAGAAATGAACAAAGCAGATAATGATGCAG
GTAATGCTGCTATAGACTCACTGCTGAATTATGAAACTGTGAAGTATTTAATAATGAAAGATATGAAGC
ACAGAGATATGATGGATTTTTGAAGACGTATGAGACTGCTTCATTGAAAAGTACCTCTACTCTGGCTATG
CTGAACTTTGGTCAAAGTGCTATTTTCACTGTCGGTTAACAGCTATAATGGTGTGCTCGCCAGTCAGGGAA
TTGTGGCAGGTACCTTACTGTTGGAGATCTAGTAAATGGTGAATGGACTGCTTTTTTCACTTTTCACTT
CCTGAACTTTCTGGAACTGTATATAGAGAGACTAGACAAGCACTCATAGATATGAACACCTTGTTTACT
CTACTCAAGGTAGACACCCAAATTAAGACAAAGTGATGGCATCTCCCTTCAGATCACACCACAGACAG
CTACCGTGGCCTTTGATAATGTGCATTTTGAATACATTGAGGGCCAGAAAGTCTTAGTGGAATATCCTT
TGAAGTCCCTGCAGGAAAGAAAGTGGCCATTGTAGGAGGTAGTGGGTGAGGAAAAGCACAATAGTGAGG
CTATTATTTGCTTCTATGAGCCTCAAAGGGTAGCATTATCTTGCTGGTCAAATATACAAGATGTGA
GCCTGAAAGCCTTCGGAGGGCAGTGGGAGTGGTACCTCAGGATGCTGTCCTCTCCATAATACTATTTA
TTACAACCTCTTATATGAAACATCAGTGCTTACCTGAGGAAGTGTATGCAGTGGCAAATTAGCTGGA
CTTCATGATGCAATCTTCAATGCCACATGGATATGACACCCAAGTAGGGGAACGAGGACTCAAGCTTT
CAGGAGGAGAAAAGCAAAGAGTAGCAATTGCAAGAGCCATTTTGAAGGACCCCAAGTCACTCTATGA
TGAAGTACTTCACTGTTAGATTGATTACTGAAGAGACTATTCTTGGTGCCATGAAGGATGTGGTCAAA
CACAGAACTTCTATTTTCACTGACACAGATTGTCAACAGTGGTTGATGCAGATGAAATCATTGTCTTGG
ATCAGGGTAAGGTAGCCGAACGTGGTACCCACCATGGTTTGGCTTGGCTAACCTCATAGTATCTATTAGA
AATGTGGCATACACAGAGCAGCCGTGTGCAGAACCATGATAACCCCAAATGGGAAGCAAAGAAAGAAAAT
ATATCAAAGAGGAGGAAAGAAAGAACTACAAGAAGAAATTGTCAATAGTGTGAAAGGCTGTGAAACT
GTTCTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234781 representing NM_001271698
Red=Cloning site Green=Tags(s)

MALLAMHSWRWAAAAAFEKRRHSAILIRPLVSVSGSGPQWRPHQLGALGTARAYQALQVWPLIEKRTCW
 HGHAGGGLHTDPKEGLKDVDRKIIKAMLSYVWPKDRPDLRARVAISLGLGGAKAMNIVVPMFKYAVD
 SLNQMSGNMLNLSAPNTVATMATAVLIGYGVSRAGAAFFNEVRNAVFGKVAQNSIRRIAKNVFLHLHNL
 DLGFHLSRQTGALSKAIDRGRGISFVLSALVFNLLPIMFEVMLVSGVL YYKCGAQFALVTLGTLGTYTA
 FTVAVTRWRTRFRIEMNKADNDAGNAIDSLLNYETVKYFNNEREYAQRVDGFLKTYETASLKSTSLAM
 LNFGQSAIFSVLTAIMVLASQGI VAGTLTVGDLVMVNGLLFQLSLPLNFLGTVYRETRQALIDMNTLFT
 LLKVDQIKDKVMASPLQITPQTATVAFDNVHFEYIEGQKVLSGISFEVPAGKKVAIVGSGSGKSTIVR
 LLFRFYEPQKGSYLAGQNIQDVSLESLRAVGVVQDAVLFHNTIYYNLLYGNISASPEEVYAVAKLAG
 LHDAILRMPHGYDTQVGERGLKLSGGEKQRVAIARAILKDPPIVLYDEATSSLDSITEETILGAMKDVK
 HRTSIFIAHRLSTVDDAEIIVLDQKVAERGTHHGLLANPHSIYSEMWHQSSRVQNHDPKWEAKKEN
 ISKEEERKKLQEEIVNSVKGCNCSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001271698

ORF Size: 2178 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_001271698.3](#)

RefSeq Size: 2447 bp

RefSeq ORF: 2181 bp

Locus ID: 22

Cytogenetics: Xq13.3

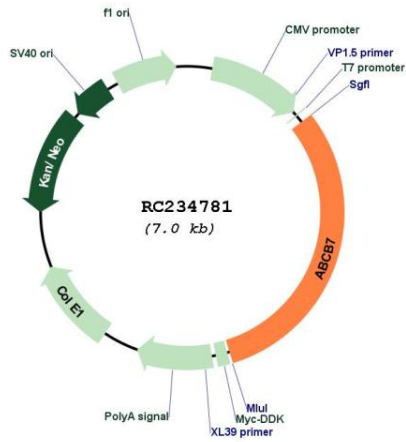
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

MW: 80.3 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 RC234781