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Product datasheet for RG234835

ABCB7 (NM_001271696) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB7 (NM_001271696) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCB7
Synonyms:	ABC7; ASAT; Atm1p; EST140535
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG234835 representing NM_001271696
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCTGCTCGCGATGCATTCTTGGCGCTGGGCGGCCGCGGCGGCTGCTTTCGAAAAGCGCCGGCACT
CCGCGATTCTGATCCGGCCTTTAGTCTCTGTTAGCGGCTCAGGTCCGCAGTGGAGGCCACATCAACTCGG
CGCCTTGGGAACCGCTCGAGCCTACCAGATTCCAGAGTCATTAAAAAGTATCACATGGCAGAGATTGGGA
AAAGGCAATTCAGGACAGTTCTTAGATGCTGCAAAGGCTCTCCAGGTATGGCCACTGATAGAAAAGAGGA
CATGTTGGCATGGTCATGCAGGAGGAGGACTCCACACAGACCCAAAAGAAGGGTTAAAAGATGTTGATAC
TCGGAAAATCATAAAAGCAATGCTTTCTTATGTGTGGCCCAAAGACAGGCCAGATCTACGAGCTAGAGTT
GCCATTTCGCTGGGATTTTTGGGTGGTGCAAAGGCCATGAATATTGTGGTTCCCTTCATGTTTAAATATG
CTGTAGACAGCCTCAACCAGATGTCGGGAAACATGCTGAACCTGAGTGATGCACCAAATACAGTTGCAAC
CATGGCAACAGCAGTTCTGATTGGCTATGGTGTATCAAGAGCTGGAGCTGCTTTTTTTAACGAAGTTCGA
AATGCAGTATTTGGCAAGGTAGCCCAGAATTCAATCCGAAGAATAGCCAAAAATGTCTTTCTCCATCTTC
ACAACCTGGATCTGGGTTTTCACCTGAGCAGACAGACGGGAGCTTTATCTAAGGCTATTGACAGAGGAAC
AAGGGGTATCAGTTTTGTCCTGAGTGCTTTGGTATTTAATCTTCTTCCCATCATGTTTGAAGTGATGCTT
GTCAGTGGTGTTTTGTATTACAAATGCGGTGCCCAGTTTGCTTTGGTAACCCTTGGAACACTTGGTACAT
ACACAGCATTCACAGTTGCAGTCACACGGTGGAGAACTAGATTTAGAATAGAAATGAACAAAGCAGATAA
TGATGCAGGTAATGCTGCTATAGACTCACTGCTGAATTATGAAACTGTGAAGTATTTTAATAATGAAAGA
TATGAAGCACAGAGATATGATGGATTTTTGAAGACGTATGAGACTGCTTCATTGAAAAGTACCTCTACTC
TGGCTATGCTGAACTTTGGTCAAAGTGCTATTTTCAGTGTCGGTTTAACAGCTATAATGGTGCTCGCCAG
TCAGGGAATTGTGGCAGGTACCCTTACTGTTGGAGATCTAGTAATGGTGAATGGACTGCTTTTTCAGCTT
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ATATCCTTTGAAGTCCCTGCAGGAAAGAAAGTGGCCATTGTAGGAGGTAGTGGGTCAGGGAAAAGCACAA
TAGTGAGGCTATTATTTCGCTTCTATGAGCCTCAAAAGGGTAGCATTTATCTTGCTGGTCAAAATATACA
AGATGTGAGCCTGGAAAGCCTTCGGAGGGCAGTGGGAGTGGTACCTCAGGATGCTGTCCTCTTCCATAAT
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CAAGCTTTCAGGAGGAGAAAAGCAAAGAGTAGCAATTGCAAGAGCCATTTTGAAGGACCCCCCAGTCATA
CTCTATGATGAAGCTACTTCATCGTTAGATTCGATTACTGAAGAGACTATTCTTGGTGCCATGAAGGATG
TGGTCAAACACAGAACTTCTATTTTCATTGCACACAGATTGTCAACAGTGGTTGATGCAGATGAAATCAT
TGTCTTGGATCAGGGTAAGGTAGCCGAACGTGGTACCCACCATGGTTTGCTTGCTAACCCTCATAGTATC
TATTCAGAAATGTGGCATACACAGAGCAGCCGTGTGCAGAACCATGATAACCCCAAATGGGAAGCAAAGA
AAGAAAATATATCCAAAGAGGAGGAAAGAAAGAAACTACAAGAAGAAATTGTCAATAGTGTGAAAGGCTG
TGGAAACTGTTCGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

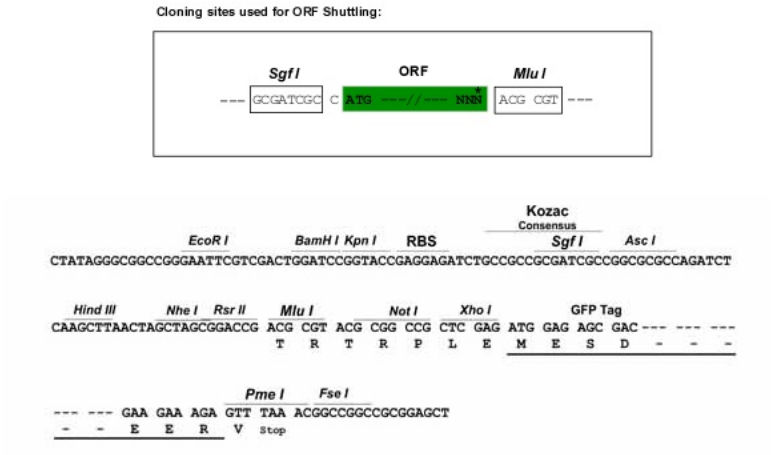
>RG234835 representing NM_001271696
Red=Cloning site Green=Tags(s)

MALLAMHSWRWAAAAAAFEKRRHSAILIRPLVSVSGSGPQWRPHQLGALGTARAYQIPESLKSITWQRLG
KGNSGQFLDAAKALQVWPLIEKRTCWHGHAGGGLHTDPKEGLKDVDTRKIIKAMLSYVWPKDRPDLRARV
AISLGFLGGAKAMNIVVPFMFKYAVDSLNQMSGNMLNLSDAPNTVATMATAVLIGYGVSRAGAAFFNEVR
NAVFGKVAQNSIRRIAKNVFLHLHNLDLGFHLSRQTGALSKAIDRGTRGISFVLSALVFNLLPIMFEVML
VSGVLYYKCGAQFALVTLGTLGTYTAFTVAVTRWRTRFRIEMNKADNDAGNAAIDSLLNYETVKYFNNER
YEAQRYDGFLKTYETASLKSTSTLAMLNFGQSAIFSVGLTAIMVLASQGIVAGTLTVGDLVMVNGLLFQL
SLPLNFLGTVYRETRQALIDMNTLFTLLKVDTQIKDKVMASPLQITPQTATVAFDNVHFEYIEGQKVLSG
ISFEVPAGKKVAIVGGSGSGKSTIVRLLFRFYEPQKGSIYLAGQNIQDVSLESLRRAVGVVPQDAVLFHN
TIYYNLLYGNISASPEEVYAVAKLAGLHDAILRMPHGYDTQVGERGLKLSGGEKQRVAIARAILKDPPVI
LYDEATSSLDSITEETILGAMKDVVKHRTSIFIAHRLSTVVDADEIIVLDQGKVAERGTHHGLLANPHSI
YSEMWHTQSSRVQNHDNPKWEAKKENISKEEERKKLQEEIVNSVKGCGNCSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001271696

ORF Size: 2256 bp

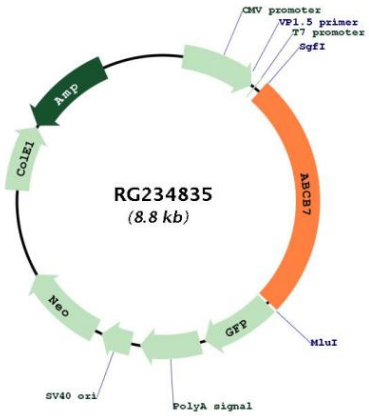
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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
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 RG234835