

Product datasheet for **RG234781**

ABCB7 (NM_001271698) Human Tagged ORF Clone

Product data:

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



[View online »](#)

ORF Nucleotide Sequence:

>RG234781 representing NM_001271698
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCTGCTCGCGATGCATTCTTGGCGCTGGGCGGCCGCGCGGCTGCTTTTCAAAGCGCCGGCACT
 CCGCGATTCTGATCCGGCCTTTAGTCTCTGTTAGCGGCTCAGGTCGCGAGTGGAGGCCACATCAACTCGG
 CGCCTTGGGAACCGCTCGAGCCTACCAGGCTCTCCAGGTATGGCCACTGATAGAAAAGAGGACATGTTGG
 CATGGTCATGCAGGAGGAGGACTCCACACAGACCCAAAAGAAGGGTTAAAAGATGTTGATACTCGGAAAA
 TCATAAAAGCAATGCTTTCTTATGTGTGGCCAAAGACAGGCCAGATCTACGAGCTAGAGTTGCCATTTT
 GCTGGGATTTTTGGTGGTGCAAAGGCCATGAATATTGTGGTTCCTTCATGTTTAAATATGCTGTAGAC
 AGCCTCAACCAGATGTCGGGAAACATGCTGAACCTGAGTATGCACCAAATACAGTTGCAACCATGGCAA
 CAGCAGTCTGATTGGCTATGGTGTATCAAGAGCTGGAGCTGCTTTTTTAAACGAAGTTCGAAATGCAGT
 ATTTGGCAAGGTAGCCCAGAATCAATCCGAAGAATAGCCAAAAATGCTTTCTCCATCTTCACAACCTG
 GATCTGGGTTTTACCTGAGCAGACAGACGGGAGCTTTATCTAAGGCTATTGACAGAGGAAACAAGGGGTA
 TCAGTTTTGTCCTGAGTGCTTTGGTATTTAATCTTCTCCCATCATGTTTGAAGTATGCTGTGCTGAGTGG
 TGTTTTGTATTACAAATGCGGTGCCAGTTTGGCTTTGGTAACCTTGGAAACACTGGTACATACACAGCA
 TTCACAGTTGAGTACACCGGTGGAGAAGTATGATTTAGAATAGAAATGAACAAAGCAGATAATGATGCAG
 GTAATGCTGCTATAGACTCACTGCTGAATTATGAACTGTGAAGTATTTTAAATGAAAGATATGAAGC
 ACAGAGATATGATGGATTTTTGAAGACGTATGAGACTGCTTCATTGAAAAGTACCTCTACTCTGGCTATG
 CTGAACTTTGGTCAAAGTGCTATTTTCAGTGTGCGTTTAAACAGCTATAATGGTGTGCTCGCCAGTCAAGGAA
 TTGTGGCAGGTACCCCTTACTGTTGGAGATCTAGTAAATGGTGAATGGACTGCTTTTTTTCAGCTTTTACTTACC
 CCTGAACCTTTCTGGAACTGTATATAGAGAGACTAGACAAGCACTCATAGATATGAACACCTTGTTTACT
 CTAACAAGGTAGACACCCAAATTAAGACAAAGTATGATGTCATCTCCCTTCAGATCACACCACAGACAG
 CTACCGTGGCCTTTGATAATGTGCATTTTGAATACATTGAGGGCCAGAAAGTCTTAGTGGAAATCCTT
 TGAAGTCCCTGCAGGAAAGAAAGTGGCCATTGTAGGAGGTAGTGGGTGAGGAAAAGCACAATAGTGAGG
 CTATTATTTTCGCTTCTATGAGCCTCAAAGGGTAGCATTATCTTGTGCTGCTCAAATATACAAGATGTGA
 GCCTGAAAGCCTTCGGAGGGCAGTGGGAGTGGTACCTCAGGATGCTGTCCTCTCCATAATACTATTTA
 TTACAACCTCTTATATGAAACATCAGTGTTCACCTGAGGAAGTGTATGCAGTGGCAAATTAGCTGGA
 CTTTCATGATGCAATCTTTCGAATGCCACATGGATATGACACCCAAGTAGGGGAACGAGGACTCAAGCTTT
 CAGGAGGAGAAAAGCAAAGAGTAGCAATTGCAAGAGCCATTTTGAAGACCCCCAGTCATACTCTATGA
 TGAAGCTACTTTCATCGTTAGATTGATTGACTGAAGAGACTATTCTTGGTGCCATGAAGGATGTGGTCAAA
 CACAGAACTTCTATTTTCATTGCACACAGATTGTCAACAGTGGTTGATGCAGATGAAATCATTGTCTTGG
 ATCAGGGTAAGGTAGCCGAACGTGGTACCCACCATGGTTTGTCTTGTCAACCCTCATAGTATCTATTGAGA
 AATGTGGCATACACAGAGCAGCCGTGTGCAGAACCATGATAACCCCAAATGGGAAGCAAAGAAAGAAAAT
 ATATCAAAGAGGAGGAAAGAAAGAACTACAAGAAGAAATTGTCAATAGTGTGAAAGGCTGTGAAACT
 GTTCGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG234781 representing NM_001271698
Red=Cloning site Green=Tags(s)

MALLAMHSWRWAAAAAFEKRRHSAILIRPLVSVSGSGPQWRPHQLGALGTARAYQALQVWPLIEKRTCW
 HGHAGGGLHTDPKEGLKDVDRKIIKAMLSYVWPKDRPDLRARVAISLGFLLGGAKAMNIVVPMFKYAVD
 SLNQMSGNMLNLSAPNTVATMATAVLIGYGVSRAGAAFFNEVRNAVFGKVAQNSIRRIAKNVFLHLHNL
 DLGFHLSRQTGALSKAIDRGRGISFVLSALVFNLLPIMFEVMLVSGVL YYKCGAQFALVTLGLTGYTA
 FTVAVTRWRTRFRIEMNKADNDAGNAIDSLLNYETVKYFNNEREYEAQRVDGFLKTYETASLKSTSTLAM
 LNFGQSAIFSVGLTAIMVLASQGI VAGTLTVGDLVMVNGLLFQLSLPLNFLGTVYRETRQALIDMNTLFT
 LLKVDQTIKDKVMASPLQITPQTATVAFDNVHFEYIEGQKVLSGISFEVPAGKKVAIVGSGSGKSTIVR
 LLFRFYEPQKGSYLAGQNIQDVSLESLRAVGVVPQDAVLFHNTIYYNLLYGNISASPEEVYAVAKLAG
 LHDAILRMPHGYDTQVGERGLKLSGGEKQRVAIARAILKDPPIVILYDEATSSLD SITEETILGAMKDVK
 HRTSIFIAHRLSTVDDADEIIVLDQGKVAERGTHHGLLANPHSISYSEMWHQSSRVQNHDPKWEAKKEN
 ISKEEERKKLQEEIVNSVKGCGNCSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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

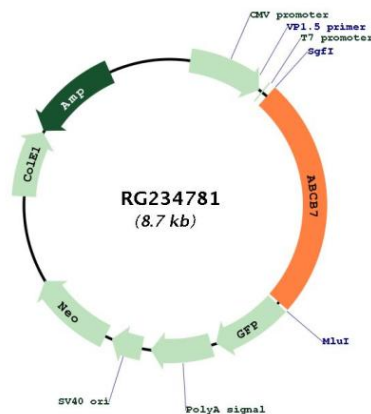
Cytogenetics: Xq13.3

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

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 RG234781