

Product datasheet for RC207182

ABCB4 (NM_018849) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB4 (NM_018849) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ABCB4
Synonyms:	ABC21; GBD1; ICP3; MDR2; MDR2/3; MDR3; PFIC-3; PGY3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207182 representing NM_018849 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATCTTGAGGCGCAAAGAACGGAACAGCCTGGCGCCCCACGAGCGCGGAGGGCGACTTTGAACTGG
GCATCAGCAGCAAACAAAAAGGAAAAACGAAGACAGTGAAAATGATTGGAGTATTAACATTGTTTCG
ATACTCCGATTGGCAGGATAAATGTTTATGTCGCTGGTACCATCATGGCCATAGCTCACGGATCAGGT
CTCCCCCTCATGATGATAGTATTTGGAGAGATGACTGACAAAATTTGTTGATACTGCAGGAACTTCTCCT
TTCCAGTGAACCTTTCTTGTGCTGCTAAATCCAGGCAAATCTGGAAGAAGAATGACTAGATATGC
ATATTACTACTCAGGATTGGGTGCTGGAGTTCCTGTTGCTGCCTATATACAAGTTTCATTTTGGACTTTG
GCAGCTGGTGCAGATCAGGAAAATTAGGCAGAAGTTTTTTCATGCTATTCTACGACAGGAAAATAGGAT
GGTTTGACATCAATGACACCACTGAACCTCAATACGCGGCTAACAGATGACATCTCCAAAATCAGTGAAGG
AATTGGTGACAAGTTGGAATGTTCTTTCAAGCAGTAGCCACGTTTTTTGCAGGATTCATAGTGGGATTC
ATCAGAGGATGGAAGCTCACCTTGTGATAATGGCCATCAGCCCTATTCTAGGACTCTCTGCAGCCGTTT
GGGCAAAGATACTCTCGGCATTTAGTGACAAAGAACTAGCTGCTTATGCAAAAGCAGGCGCCGTGGCAGA
AGAGCCTCTGGGGCCATCAGGACTGTGATAGCTTTGGGGGCCAGAACAAGAGCTGGAAGGTATCAG
AAACATTTAGAAAATGCCAAAGAGATTGGAATTAAGAAAGCTATTTTCAGCAAACATTTCCATGGGTATTG
CCTTCTGTTAATATATGCATCATATGCACTGGCCTTCTGGTATGGATCCACTCTAGTCATATCAAAGA
ATATACTATTGGAATGCAATGACAGTTTTTTTTTCAATCCTAATTGGAGCTTTCAGTGCTGGCCAGGCT
GCCCCATGATTGATGCTTTTGCCAATGCAAGAGGAGCAGCATATGTGATCTTTGATATTATTGATAATA
ATCCTAAAATTGACAGTTTTTCAGAGAGAGGACACAAACCAGACAGCATCAAAGGGAATTTGGAGTTCAA
TGATGTTCACTTTTCTTACCCTTCTCGAGCTAACGTCAAGATCTTGAAGGGCCTCAACCTGAAGGTGCAG
AGTGGGCAGACGGTGGCCCTGGTTGGAAGTAGTGGCTGTGGGAAGAGCACACCGTCCAGCTGATACAGA
GGCTCTATGACCCTGATGAGGGACAATTAACATTGATGGCAGGATATTAGGAACCTTAATGTAACATA
TCTGAGGGAAATCATTGGTGTGGTGAAGTAGTGGAGCGGCTGTTTTCCACCACAATTGCTGAAAATATT



[View online »](#)

TGTTATGGCCGTGAAATGTAACCATGGATGAGATAAAGAAAGCTGTCAAAGAGGCCAACGCCTATGAGT
TTATCATGAAATTACCACAGAAATTTGACACCCTGGTTGGAGAGAGAGGGGCCAGCTGAGTGGTGGGCA
GAAGCAGAGGATCGCCATTGCACGTGCCCTGGTTCGCAACCCCAAGATCCTTCTGCTGGATGAGGCCACG
TCAGCATTGGACACAGAAAGTGAAGCTGAGGTACAGGCAGCTCTGGATAAGGCCAGAGAAGGCCGGACCA
CCATTGTGATAGCACACCGACTGTCTACGGTCCGAAATGCAGATGTCATCGCTGGGTTTGAGGATGGAGT
AATTGTGGAGCAAGGAAGCCACAGCGAACTGATGAAGAAGGAAGGGGTGACTTCAAACCTGTCAACATG
CAGACATCAGGAAGCCAGATCCAGTCAGAAGAATTTGAACTAAATGATGAAAAGGCTGCCACTAGAATGG
CCCCAAATGGCTGAAATCTCGCCTATTTAGGCATTCTACTCAGAAAAACCTTAAAAATTCACAAATGTG
TCAGAAGAGCCTTGATGTGAAACCGATGGACTTGAAGCAAATGTGCCACCAAGTGTCTTTCTGAAGGTC
CTGAAACTGAATAAAACAGAATGGCCCTACTTTGTCGTGGGAACAGTATGTGCCATTGCCAATGGGGGGC
TTCAGCCGGCATTTCAGTCATATTCTCAGAGATCATAGCGATTTTGGACCAGGCGATGATGCAGTGAA
GCAGCAGAAGTGAACATATTCTCTTTGATTTTCTTATTCTGGGAATTATTTCTTTTTTACTTTCTTC
CTTCAGGGTTTCAGTGGGAAAGCTGGCGAGATCCTCACCAGAAGACTGCGGTCAATGGCTTTTAAAG
CAATGCTAAGACAGGACATGAGCTGGTTTGTGACCATAAAAACAGTACTGGTGCATTTCTACAAGACT
TGCCACAGATGCTGCCAAGTCCAAGGAGCCACAGGAACCAGGTTGGCTTAAATTGCACAGAATATAGCT
AACCTTGGAACTGGTATTATCATATCATTATCTACGGTTGGCAGTTAACCTATTGCTATTAGCAGTTG
TTCCAATTATTGCTGTGTGAGGAATTGTTGAAATGAAATGTTGGCTGGAATGCCAAAAGAGATAAAAA
AGAACTGGAAGCTGCTGGAAAGATTGCAACAGAGGCAATAGAAAAATTAGGACAGTTGTGTCTTTGACC
CAGGAAAGAAAATTTGAATCAATGTATGTTGAAAAATTGTATGGACCTTACAGGAATTCTGTGCAGAAGG
CACACATCTATGGAATTAATTTAGTATCTCACAAGCATTATGTATTTTCTATGCCGGTTGTTTTCG
ATTTGGTGCATATCTCATTGTGAATGGACATATGCGCTTACAGAGATGTTATTCTGGTGTCTTCTGCAATT
GATTTGGTGCAGTGGCTCTAGGACATGCCAGTTCATTTGCTCCAGACTATGCTAAAGCTAAGCTGTCTG
CAGCCCACTTATTCATGCTGTTTGAAGACAACCTCTGATTGACAGCTACAGTGAAGAGGGGCTGAAGCC
TGATAAATTTGAAGGAAATATAACATTTAATGAAGTCGTGTTCAACTATCCCACCCGAGCAAACGTGCCA
GTGCTTACAGGGCTGAGCCTGGAGGTGAAGAAAGGCCAGACACTAGCCCTGGTGGCAGCAGTGGCTGTG
GGAAGAGCACGGTGGTCCAGCTCCTGGAGCGTTCTACGACCCTTGGCGGGGACAGTGTGTGGACTT
TGGTTTTAGCTTCTCGATGGTCAAGAAGCAAAGAACTCAATGTCCAGTGGCTCAGAGCTCAACTCGGA
ATCGTGTCTCAGGAGCCTATCCTATTTGACTGCAGCATTGCCGAGAATATTGCCTATGGAGACAACAGCC
GGGTTGTATCACAGGATGAAATGTGAGTGCAGCCAAAGCTGCCAACATACATCCTTTATCGAGACGTT
ACCCACAAAATGAAACAAGAGTGGGAGATAAGGGGACTCAGCTCTCAGGAGGTCAAAAACAGAGGATT
GCTATTGCCGAGCCCTCATCAGACAACCTCAAATCCTCCTGTTGGATGAAGCTACATCAGCTCTGGATA
CTGAAAGTGAAAAGGTTGTCCAAGAAGCCCTGGACAAAGCCAGAGAAGGCCGACCTGCATTGTGATTGC
TCACCGCCTGTCCACCATCCAGAATGCAGACTTAATAGTGGTGTTCAGAATGGGAGAGTCAAGGAGCAT
GGCAGCATCAGCAGCTGCTGGCACAGAAAGGCATCTATTTTTCAATGGTCAAGTGTCCAGGCTGGGACAC
AGAACTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207182 representing NM_018849
 Red=Cloning site Green=Tags(s)

```

MDLEAAKNGTAWRPTSAEGDFELGISSKQKRKTKTKVMIGVLTFRYSDWQDKLFMSLGTIMAIHSGG
LPLMMIVFGEMTDKFDVTAGNFSFPVNFSLLLNPGKILEEEMTRYAYYSGLGAGVLAAYIQVSFWTL
AAGRQIRKIRQKFFHAILRQEIGWFDINDTTELNTRLTDDISKISEGIGDKVGMFFQAVATFFAGFIVGF
IRGWKLTIVIMAI SPILGL SAAVWAKILSAFSDKELAAAYAKAGVAEEALGAIRTVIAFGGQNKELERYQ
KHLENAKEIGIKKAI SANISMGIAFLLIYASYALAFWYGSTLVISKEYTIGNAMTVFFSILIGAFSVGQA
APCIDAFANARGAAYVIFDIIDNNPKIDSF SERGHKPD SIKGNLEFNDVHF SYPSRANVKILKGLNLKVQ
SGQTVALVGS SGC GKSTTVQLIQRLYDPDEGTINIDGQDIRNFVNYLREIIGVVSQEPVLFSTTIAENI
CYGRGNTMDEIKKAVKEANAYEFIMKLPQKFDL VGERG AQLSGGQKQRIAIARALVRNPKILLDEAT
SALDTESEAEVQAALDKAREGRTTIVIAHRLSTVRNADVIAGFEDGVIVEQGSHELMKKEGVYFKLVNM
QTSGSQIQSEEFELNDEKAATRMANGWKSRLFRHSTQKNL KNSQMCQKSLDVETDGL EANVPPVSLKV
LKLNKTEWPYFVVGTVCAIANGGLQPAFSVIFSEIIAIFGPGDDAVKQKCNIFSLIFLFLGIISFFTF
LQGFTFGKAGEILTRRLRSMFAKAMLRQDMSWFDHKNSTGALSTRLATDAAQVQATGTRLALIAQNTA
NLGTGIIISFIYQWQLTLLLLAVVPIIAVSGIVEMKLLAGNAKRDKKELEAAGKIATEAIENIRTVVSLT
QERKFESMYVEKLYGPRNSVQKAHIYGITFSISQAFMYFSYAGCFRFGAYLIVNGHMRFRDVILVFSAI
VFGAVALGHASSFAPDYAKAKLSAAHLFMLFERQPLIDSYSEEGLKPKDFEGNITFNEVFNYPTRANVP
VLQGLSLEVKKGQTLALVGS SGC GKSTTVQ LLERFYDPLAGTVFVDFGFLLDGQEAKKLNQWLRQLG
IVSQEPILFDCSIAENIAYGDN SRVVSQDEIVSAAKAANIHPFIETLPHKYETRVGDKGTQLSGGQKQRI
AIARALIRQPQILLLDEATSALDTESEKVVQEALDKAREGRTCIVIAHRLSTIQNADLIVVFQNGRVKEH
GTHQQLLAQKGIYFSMVS VQAGTQNL
  
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_018849

ORF Size: 3858 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 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_018849.3](#)

RefSeq Size: 3988 bp

RefSeq ORF: 3861 bp

Locus ID: 5244

UniProt ID: [P21439](#)

Cytogenetics: 7q21.12

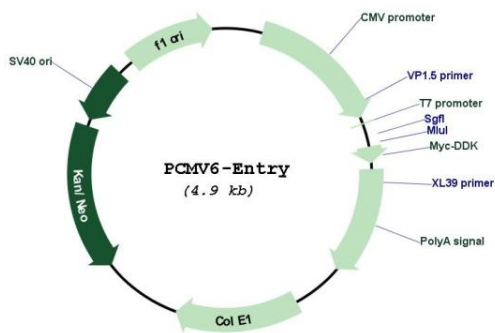
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

MW: 141.3 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 full transporter and member of the p-glycoprotein family of membrane proteins with phosphatidylcholine as its substrate. The function of this protein has not yet been determined; however, it may involve transport of phospholipids from liver hepatocytes into bile. Alternative splicing of this gene results in several products of undetermined function. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC207182