

## Specifications:

|                |                  |
|----------------|------------------|
| Gene:          | hABCB1           |
| Accession:     | AAA59576         |
| Insert size:   | 3855bp           |
| Concentration: | 10µg at 0.2µg/µL |

## hMDR1/ABCB1 cDNA Plasmid

**ABCB1 ATP-binding  
cassette, sub-family B  
(MDR/TAP), member 1  
[ *Homo sapiens* (human) ]**

**Also known as:** CLCS; MDR1;  
P-GP; PGY1; ABC20; CD243;  
GP170

### Summary:

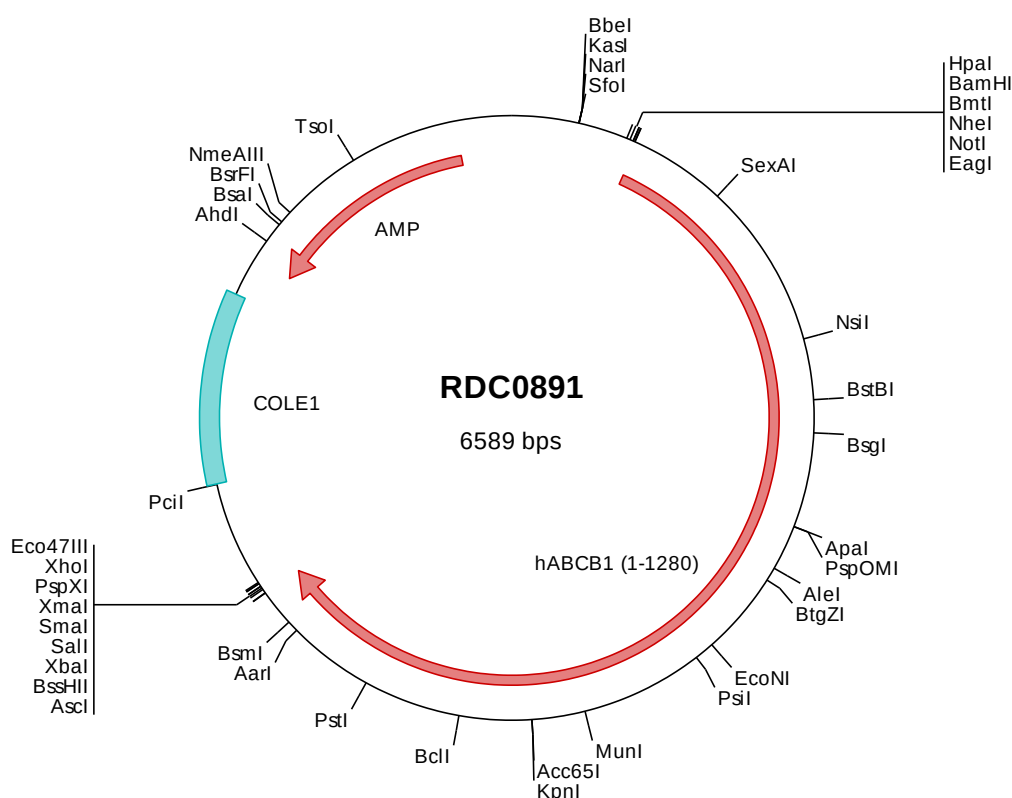
ABCB1 is a member of the superfamily of ATP-binding cassette (ABC) transporters that transport various molecules across extra- and intra-cellular membranes. This protein is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. ABCB1 also functions as a transporter in the blood-brain barrier.

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

|             |                                                                     |
|-------------|---------------------------------------------------------------------|
| Formulation | cDNA is provided in 10 mM Tris-Cl, pH 8.5                           |
| Shipping    | Ships at ambient temperature                                        |
| Stability   | 1 year from date of receipt when stored at -20°C to -80°C           |
| Storage     | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. |





## > RDC0891 Plasmid DNA Sequence

```
1      tcgcgcggtt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccc  gagacggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccc
101    tcagggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatattgc  gttgtaata
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401    ggagacgtgt  taacaagctt  ggateccgata  tcgctagcgc  gggcgccacc  atggatcttg  aaggggacgg  caatggagga  gcaaaaga  agaacttttt
501    taaactgaac  aataaaagtg  aaaaagataa  gaaggaaaag  aaaccaactg  tcagtgtatt  ttcaatgttt  cgctattcaa  attggcttga  caagtgtgat
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1301   ctaaaagaat  tgggataaag  aaagctatta  tatttgacaa  taattcttca  gataattgat  aataagccaa  gtattgacag  ctattcgaa  agtgggcaca
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```



## > RDC0891 Translated Insert Sequence

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101 tgffmnlleed mtryayyyysg igagvlvaay iqvsfwclaa grqihkirkq ffhaimrgei gwfdvhdvge lntrltddvs kinegigdkki gmffqsmatf
201 ftgfivgftr gwktltvila ispvlglsaa vwakilssft dkellayaka gavaeevlaa irtviafaggg kkelerynkn leeakrigik kaitanisig
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501 ekavkeanay dfimklphkf dtlvgergaq lsggqkqria iaralvrnpk illldeatsa ldteseavvq valdkarkgr ttiviahrls tvrnadviag
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701 mklntltepy fvvgvfcaii ngglqpafai ifskiigvft riddpetkrq nsnlfsllfl algiisfitf flqgftfgka geiltkrly mvfrsmlrqd
801 vswfddpknt tgalttrlan daaqvkgag srlavitqni anlgtgiiis fiygwqltll llaivpiiai agvvemkmls qqalkdkkel egagkiatea
901 ienfrtvvsl tgeqkfehmy aqslqvpyrn slrkahifgi tfsftqammy fsyagcfrfg aylvahklms fedvllvfsa vvfgamavvg vssafadyak
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