

# **Product datasheet for RC218976**

### MRP2 (ABCC2) (NM\_000392) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: MRP2 (ABCC2) (NM\_000392) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: MRP2

**Synonyms:** ABC30; CMOAT; cMRP; DJS; MRP2

Mammalian Cell Neomycin

Selection:

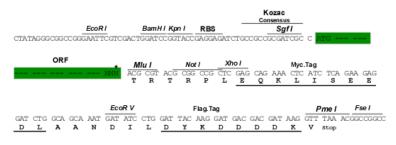
Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg5510">https://cdn.origene.com/chromatograms/mg5510</a> c01.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme: Cloning sites used for ORF Shuttling:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000392

ORF Size: 4635 bp



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**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 <a href="mailto:customercom">customercom</a> 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.

Note:

Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: <u>NM 000392.4</u>

 RefSeq Size:
 4868 bp

 RefSeq ORF:
 4638 bp

 Locus ID:
 1244

 UniProt ID:
 Q92887

 Cytogenetics:
 10q24.2

**Domains:** ABC membrane, ABC tran, AAA

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** ABC transporters

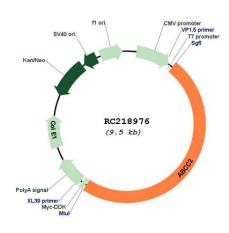
**MW:** 174 kDa



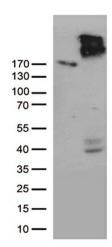
#### **Gene Summary:**

The 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 MRP subfamily which is involved in multi-drug resistance. This protein is expressed in the canalicular (apical) part of the hepatocyte and functions in biliary transport. Substrates include anticancer drugs such as vinblastine; therefore, this protein appears to contribute to drug resistance in mammalian cells. Several different mutations in this gene have been observed in patients with Dubin-Johnson syndrome (DJS), an autosomal recessive disorder characterized by conjugated hyperbilirubinemia. [provided by RefSeq, Jul 2008]

## **Product images:**



Circular map for RC218976



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ABCC2 (Cat# RC218976, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ABCC2 (Cat# [TA812520])(1:500).