

Product datasheet for RC218976L3

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

MRP2 (ABCC2) (NM_000392) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MRP2 (ABCC2) (NM_000392) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: MRP2

Synonyms: ABC30; CMOAT; cMRP; DJS; MRP2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218976).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



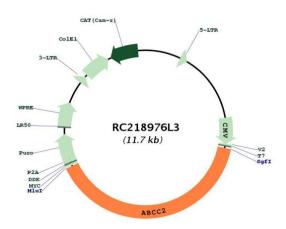


 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_000392 **ORF Size:** 4635 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. <u>More info</u>

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).



Cytogenetics:

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: <u>NM 000392.1</u>

 RefSeq Size:
 4868 bp

 RefSeq ORF:
 4638 bp

 Locus ID:
 1244

 UniProt ID:
 Q92887

Domains: ABC_membrane, ABC_tran, AAA

Protein Families: Druggable Genome, Transmembrane

10q24.2

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]