

## **Product datasheet for TF315026**

## OriGene Technologies, Inc.

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## MRP2 (ABCC2) Human shRNA Plasmid Kit (Locus ID 1244)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** MRP2 (ABCC2) Human shRNA Plasmid Kit (Locus ID 1244)

Locus ID: 1244

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

**Vector:** pRFP-C-RS (TR30014)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Retroviral plasmids

Components: ABCC2 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 1244).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 000392, NM 000392.1, NM 000392.2, NM 000392.3, NM 000392.4, BC136419, BM765259

UniProt ID: Q92887

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).