

## Product datasheet for **TG315024**

### MRP5 (ABCC5) Human shRNA Plasmid Kit (Locus ID 10057)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	MRP5 (ABCC5) Human shRNA Plasmid Kit (Locus ID 10057)
Locus ID:	10057
Synonyms:	ABC33; EST277145; MOAT-C; MOATC; MRP5; pABC11; SMRP
Vector:	pGFP-V-RS (TR30007)
E. coli Selection:	Kanamycin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ABCC5 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 10057). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.
RefSeq:	<a href="#">NM_001023587</a> , <a href="#">NM_001320032</a> , <a href="#">NM_005688</a> , <a href="#">NR_135125</a> , <a href="#">NM_001023587.1</a> , <a href="#">NM_001023587.2</a> , <a href="#">NM_005688.1</a> , <a href="#">NM_005688.2</a> , <a href="#">NM_005688.3</a> , <a href="#">BC015334</a> , <a href="#">BC050744</a> , <a href="#">BC051358</a> , <a href="#">BC140771</a> , <a href="#">BC142670</a> , <a href="#">BC142719</a> , <a href="#">BC144495</a> , <a href="#">NM_005688.4</a> , <a href="#">NM_001023587.3</a>
UniProt ID:	<a href="#">O15440</a>
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 functions in the cellular export of its substrate, cyclic nucleotides. This export contributes to the degradation of phosphodiesterases and possibly an elimination pathway for cyclic nucleotides. Studies show that this protein provides resistance to thiopurine anticancer drugs, 6-mercaptopurine and thioguanine, and the anti-HIV drug 9-(2-phosphonylmethoxyethyl)adenine. This protein may be involved in resistance to thiopurines in acute lymphoblastic leukemia and antiretroviral nucleoside analogs in HIV-infected patients. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]



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- 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 [techsupport@origene.com](mailto:techsupport@origene.com). 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](mailto: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).