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# Product datasheet for KN217669

# MRP5 (ABCC5) Human Gene Knockout Kit (CRISPR)

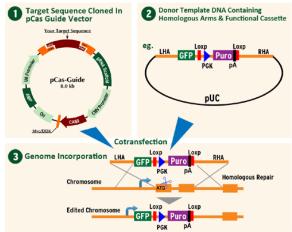
## **Product data:**

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	MRP5
Locus ID:	10057
Components:	<ul> <li>KN217669G1, MRP5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target</li> <li>Sequence: GTCCTGGGTATAGAAGTGTG</li> <li>KN217669G2, MRP5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target</li> <li>Sequence: TCTTAGGAAAGGAAACTGAC</li> <li>KN217669D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</li> <li>GE100003, scramble sequence in pCas-Guide vector</li> </ul>
RefSeq:	<u>NM 001023587, NM 001320032, NM 005688, NR 135125</u>
UniProt ID:	<u>O15440</u>
Synonyms:	ABC33; EST277145; MOAT-C; MOATC; MRP5; pABC11; SMRP
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-mercatopurine 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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## **Product images:**



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter

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