

## Product datasheet for RC217669

### MRP5 (ABCC5) (NM\_001023587) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MRP5 (ABCC5) (NM\_001023587) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MRP5  
**Synonyms:** ABC33; EST277145; MOAT-C; MOATC; MRP5; pABC11; SMRP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC217669 representing NM\_001023587  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGAAGGATATCGACATAGGAAAAGAGTATATCATCCCCAGTCTGGGTATAGAAGTGTGAGGGAGAGAA  
 CCAGCACTTCTGGGACGCACAGAGACCGTGAAGATTCCAAGTTCAGGAGAACTCGACCGTTGGAATGCCA  
 AGATGCCTTGAAACAGCAGCCCGAGCCGAGGGCCTCTCTTGTATGCCTCCATGCATTCTCAGCTCAGA  
 ATCCTGGATGAGGAGCATCCCAAGGAAAGTACCATCATGGCTTGAGTGTCTGAAGCCCATCCGGACTA  
 CTCCAAACACCAGCACCCAGTGGACAATGCTGGCTTTTTTCCGTATGACTTTTTCTGGCTTTCTTC  
 TCTGGCCCGTGTGGCCCAAGAAGGGGAGCTCTCAATGGAAGACGTGTGGTCTCTGTCCAAGCAGAG  
 TCTTCTGACGTGAACTGCAGAAGACTAGAGAGACTGTGGCAAGAAGAGCTGAATGAAGTTGGCCAGACG  
 CTGCTTCCTGCGAAGGGTTGTGTGGATCTTCTGCCGACCAGGCTCATCCTGTCCATCGTGTGCCTGAT  
 GATCACGCAGCTGGCTGGCTTTCAGTGGACAAATTTTCAGGATGGCTGTATTCTGCGGTCAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217669 representing NM\_001023587  
 Red=Cloning site Green=Tags(s)

MKDIDIGKEYIIPSPGYRSVRERTSTSGTHRDREDSKFRTRPLECQDALETAARAEGLSLDASMHSQLR  
 ILDEEHPKGYHHGLSALKPIRTTSKHQHPVDNAGLFSMTFSWLSSLARVAHKKGELSMEDVWLSKHE  
 SSDVNCRRRLERLWQEELNEVGPDAASLRVWVIFCRTRLILSIVCLMITQLAGFSGPNFQDGCILRSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



[View online »](#)



**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:** [NM\\_001023587.3](#)

**RefSeq Size:** 2007 bp

**RefSeq ORF:** 627 bp

**Locus ID:** 10057

**UniProt ID:** [O15440](#)

**Cytogenetics:** 3q27.1

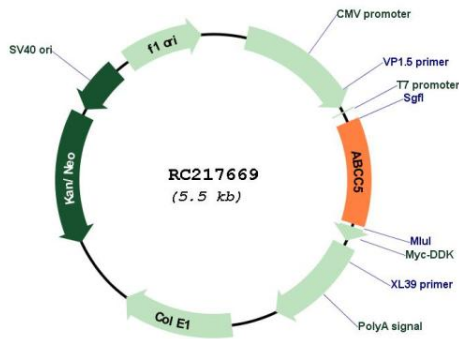
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** ABC transporters

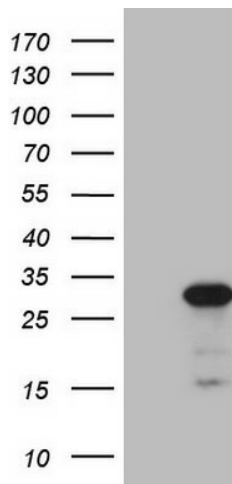
**MW:** 23.5 kDa

**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 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]

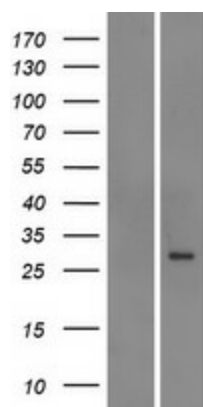
Product images:



Circular map for RC217669



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ABCC5 (Cat# RC217669, 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-ABCC5 (Cat# [TA808487])(1:2000). Positive lysates [LY422609] (100ug) and [LC422609] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY422609]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217669 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).