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ABCB1 Knockout 293T Cell Lysate, Homozygous

Catalog No.: RM02482

Basic Information

Catalog No.
RM02482

Category
Cell Lysate

Parental Cell line
293T

Genotype
Knockout

Background

The membrane-associated 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 MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. Mutations in this gene are associated with colchicine resistance and Inflammatory bowel disease 13. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Feb 2017]

Gene Information

Gene Symbol
ABCB1

Species
Human

Gene ID
5243

Swiss Prot
P08183

Synonyms
ABC20; CD243; CLCS; GP170; MDR1; P-GP; PGY1

Product Information

Description
ABCB1 Knockout 293T Cell Line is engineered from 293T cell line with Gene-Editing technology.
Allele-1:53bp deletion in exon3
Allele-2:53bp deletion in exon3
Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

Packaging
1 vial parental cell Lysate and 1 vial knockout cell Lysate

Shipping Conditions
4℃

Amount
50μL, 2μg/μL.

Storage
Lysate is stable for 12 months when stored at -20℃. Minimizing freeze-thaw cycles.

Protocol
To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

Contact

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Sequencing data

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WT    TTGACAAGTTGTAT**************GATGCTGGTGTTTG
Mut   TTGACAAGTTGTAT***Deletion***GATGCTGGTGTTTG
Allele-1：53bp deletion  in exon3

WT    TTGACAAGTTGTAT**************GATGCTGGTGTTTG
Mut   TTGACAAGTTGTAT***Deletion***GATGCTGGTGTTTG
Allele-2：53bp deletion  in exon3
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Genome sequence analysis of PCR products from parental (WT) and ABCB1 knockout (KO) 293T cells, using sanger sequencing.