Anti-MDR1 Antibody [1G6]

RT1383

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF
Molecular Wt:	170 kDa
Clone number:	1G6

Description: Cells selected for resistance to a single cytotoxic drug may become cross-resistant to a broad range of drugs with different structures and cellular targets. This phenomenon is called multiple drug resistance (MDR). The MDR proteins (Mdrs) are members of a highly conserved superfamily of ATP-binding cassette transport proteins. Mdr functions as an energy-dependent efflux pump for structurally diverse agents ranging from ions to peptides. It is implicated in the development of the multiple drug resistance observed in human cancer cells following prolonged chemotherapy. The classic form of MDR is associated with an increase in the Mdr protein, but not all cases of MDR can be attributed to a rise in Mdr levels. Mdr-1 is an apical transmembrane protein that is an integral part of the blood-brain barrier and functions as a drug-transport pump transporting a variety of drugs from the brain back into the blood. In the human population, there are 15 polymorphisms in the Mdr-1 gene.

Immunogen: Mdr of hamster origin.

Subcellular location: Cell membrane

Database links: SwissProt: P08183 Human

Recommended Dilutions:

WB	1:10-1:200
IP	1-2 μg per 100-500 μg of total protein(1 ml of cell lysate)
IF	1:10-1:200
IHC-P	1:10-1:200

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃

Purity: Protein A affinity purified.

No Images

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Yu, D.S., et al. 2006. Modulation of Mdr-1 gene by MIF and GSTpi with drug resistance generation in hormone independent prostate cancer. Arch. Androl. 52: 283-91.
2. Wilczynski, J.R., et al. 2006. Is Mdr-1 gene a key to successful chemotherapy Ginekol. Pol. 77: 476-484.
3. Roy, J.N., et al. 2006. Cyp3A4, Cyp3A5, and Mdr-1 genetic influences on tacrolimus pharmacokinetics in renal transplant recipients. Pharmacogenet. Genomics 16: 659-65.