ARG42284
anti-MDR1 / P Glycoprotein 1 antibody [UIC2] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [UIC2] recognizes MDR1 / P Glycoprotein 1
Tested Reactivity	Hu
Species Does Not React With	Ms, Rat
Tested Application	FACS
Specificity	The mouse monoclonal antibody UIC2 recognizes an extracellular epitope on CD243 (MDR-1), an approximately 170 kDa ABC transporter expressed on hematopoietic stem cells, B, T, and NK cells, or on many multidrug resistant cancer cells. This antibody preferentially recognizes CD243 in the process of transporting substrate.
Host	Mouse
Clonality	Monoclonal
Clone	UIC2
Isotype	IgG2a, kappa
Target Name	MDR1 / P Glycoprotein 1
Species	Human
Immunogen	NIH/3T3 cells transfected with Human MDR1 cDNA.
Conjugation	PE
Alternate Names	PGY1; ABC20; P-GP; ATP-binding cassette sub-family B member 1; Multidrug resistance protein 1; CD antigen CD243; GP170; CLCS; CD243; MDR1; EC 3.6.3.44; P-glycoprotein 1

Application Instructions

Application table

Application	Dilution
FACS	10 µl / 100 µl of whole blood or 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

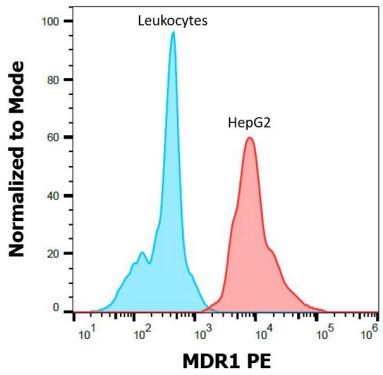
Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ABCB1
Gene Full Name	ATP-binding cassette, sub-family B (MDR/TAP), member 1
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]
Function	Translocates drugs and phospholipids across the membrane (PubMed:8898203, PubMed:2897240, PubMed:9038218). Catalyzes the flop of phospholipids from the cytoplasmic to the exoplasmic leaflet of the apical membrane. Participates mainly to the flop of phosphatidylcholine, phosphatidylethanolamine, beta-D-glucosylceramides and sphingomyelins (PubMed:8898203). Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:2897240, PubMed:9038218). [UniProt]
Calculated Mw	141 kDa
Cellular Localization	Cell membrane; Multi-pass membrane protein. [UniProt]

Images



ARG42284 anti-MDR1 / P Glycoprotein 1 antibody [UIC2] (PE) FACS image

Flow Cytometry: HepG2 cells (red) and leukocytes (blue, negative sample) stained with ARG42284 anti-MDR1 / P Glycoprotein 1 antibody [UIC2] (PE).