Technical Data Sheet

Purified Mouse Anti-Human MRP1

Product Information

 Material Number:
 557594

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

 Clone:
 QCRL-3

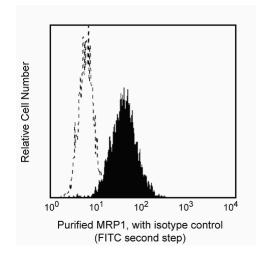
 Isotype:
 Mouse IgG2a, κ

 Reactivity:
 QC Testing: Human

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Reacts with an intracellular epitope of the multidrug resistance protein (MRP1). MRP1 is a 190 kDa integral membrane phosphoglycoprotein, member of the ATP-binding cassette transporter proteins, overexpressed in some drug-selected resistant cell lines and has been shown to cause multidrug resistance in transfected cells. Clone QCRL-3 was generated using non-denatured membranes from H69AR, an MRP1-overexpressing, multidrug resistant, drug-selected cell line. Its epitope has been localized to the first nucleotide binding domain of MRP1 between amino acids 617 and 932.3 QCRL-3 does not cross-react with human MDR1 or MDR3 gene products, nor with murine MRP1. It is reported that mAb QCRL-3 inhibits the ATP-dependent transport activity of MRP1 in inside-out membrane vesicles.



Profile of human MRP1 (clone QCRL-3) reactivity on fixed, permeabilized H69AR cell line analyzed by flow cytometry. The cell line was fixed and permeabilized with BD Cytofix/Cytoperm™ Cat. No. 554714. Second step staining with Cat. No. 555988.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested		

Suggested Companion Products

Catalog Number	Name	Size	Clone	
555571	Purified Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178	
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal	
554714	BD Cytofix/Cytoperm Fixation/Permeablization Kit	250 tests	(none)	

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Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before
 discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Cole SP, Bhardwaj G, Gerlach JH, et al. Overexpression of a transporter gene in a multidrug-resistant human lung cancer cell line. *Science*. 1992; 258(5088):1650-1654.(Biology)

Hipfner DR, Gauldie SD, Deeley RG, Cole SP. Detection of the M(r) 190,000 multidrug resistance protein, MRP, with monoclonal antibodies. *Cancer Res.* 1994; 54(22):5788-5792.(Biology)

Hipfner DR, Mao Q, Qiu W, et al. Monoclonal antibodies that inhibit the transport function of the 190-kDa multidrug resistance protein, MRP. Localization of their epitopes to the nucleotide-binding domains of the protein. *J Biol Chem.* 1999; 274(22):15420-15426.(Biology)

Loe DW, Almquist KC, Deeley RG, Cole SP. Multidrug resistance protein (MRP)-mediated transport of leukotriene C4 and chemotherapeutic agents in membrane vesicles. Demonstration of glutathione-dependent vincristine transport. *J Biol Chem.* 1996; 271(16):9675-9682.(Biology)

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