Technical Data Sheet

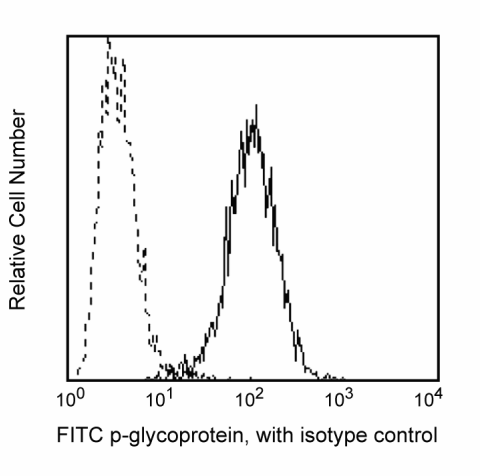
FITC Mouse Anti-Human P-glycoprotein

Product Information

Material Number:	**557002**
Alternate Name:	MDR
Size:	100 Tests
Vol. per Test:	20 µl
Clone:	17F9
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 17F9 monoclonal antibody specifically binds to the 170-180 kDa transmembrane glycoprotein (P-glycoprotein), a product of the multidrug resistance-1 (MDR1) gene. This glycoprotein is expressed on MDR positive cells and has been reported to be expressed on many normal tissues, such as adrenal glands and endothelium, in the brain and skin. P-glycoprotein is known to impart drug resistance to cells by pumping many anti-cancer drugs out of the cytoplasm. 17F9 antibody is able to partially block the binding of UIC2 antibody (another MDR-specific monoclonal antibody). Immunoprecipitation application is reported, but not routinely tested in house.



Profile of P-glycoprotein (MDR) expressed on PMG-Y cell line analyzed on a BD FACScan™ (BDIS, San Jose, CA). *PMG-Y cells are an internally developed transfectant cell line developed to express P-glycoprotein (MDR).*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555742	FITC Mouse IgG2b κ Isotype Control	100 Tests	27-35
554656	Stain Buffer (FBS)	500 mL	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. 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.

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4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. An isotype control should be used at the same concentration as the antibody of interest.

References

Benard J, Bourhis J, Riou G. Clinical significance of multiple drug resistance in human cancers. *Anticancer Res.* 1990; 10(5A):1297-1302. (Biology)
Goldstein LJ, Galski H, Fojo A, et al. Expression of a multidrug resistance gene in human cancers. *J Natl Cancer Inst.* 1989; 81(2):116-124. (Biology)
Shi T, Wrin J, Reeder J, Liu D, Ring DB. High-affinity monoclonal antibodies against P-glycoprotein. *Clin Immunol Immunopathol.* 1995; 76(1):44-51. (Biology)

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