Technical Data Sheet

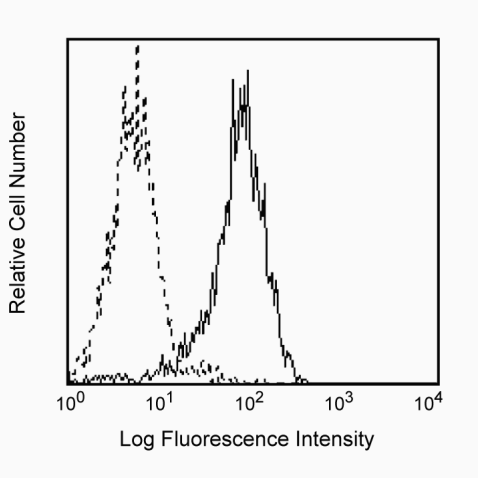
Purified Mouse Anti-Human P-glycoprotein

Product Information

Material Number:	**557001**
Alternate Name:	MDR
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	17F9
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤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 BC FACScan™ (BDIS, San Jose, CA). *PMG-Y cells are an internally developed transfectant cell line developed to express P-glycoprotein (MDR). FITC Goat Anti-Mouse IgG/IgM (Cat. No. 555988) was used as the second step reagent.*

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes

Application

Flow cytometry	Routinely Tested
Immunoprecipitation	Tested During Development
Western blot	Reported

Suggested Companion Products

Catalog Number	Name	Size	Clone
555740	Purified Mouse IgG2b κ Isotype Control	0.1 mg	27-35
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal
554656	Stain Buffer (FBS)	500 mL	(none)
557002	FITC Mouse Anti-Human P-glycoprotein	100 Tests	17F9
557003	PE Mouse Anti-Human P-glycoprotein	100 Tests	17F9

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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.
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.
4. 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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