Technical Data Sheet

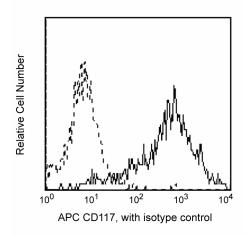
APC Mouse Anti-Human CD117

Product Information

Material Number:	550412	
Alternate Name:	KIT ; c-Kit; SCFR; PBT: Mast/stem cell growth factor receptor	
Size:	0.1 mg	
Concentration:	0.2 mg/ml	
Clone:	YB5.B8	
Isotype:	Mouse IgG1, κ	
Reactivity:	QC Testing: Human	
Workshop:	V C009	
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.	

Description

The YB5.B8 monoclonal antibody specifically binds to CD117. CD117, also known as c-Kit, is a 145 kDa cell-surface glycoprotein with tyrosine kinase activity. CD117 is present on hematopoietic progenitor cell subsets, thymocytes, mast cells, hepatocytes and histiocytes. CD117 serves as a cytokine receptor for steel factor (SLF), also known as stem cell factor (SCF) or mast cell growth factor (MGF). The interaction of c-Kit and SLF is crucial to hematopoiesis, mast cell differentiation, melanogenesis, and germ cell development. The ability of the YB5.B8 antibody to block the binding of c-Kit ligand is still controversial.



Profile of TF-1 cells (erythroleukemia cell line) analyzed by flow cytometry

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application			
Flow cytometry	Routinely Tested		
Suggested Compa	nion Products		
Catalog Number	Name	Size	Clone
555751	APC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21
 Please refer to ww For fluorochrome s Caution: Sodium a 	vary, each investigator should titrate the reagent to obtain optim w.bdbiosciences.com/pharmingen/protocols for technical protoc spectra and suitable instrument settings, please refer to our Fluor zide yields highly toxic hydrazoic acid under acidic conditions. accumulation of potentially explosive deposits in plumbing.	cols. rochrome Web Page at www.bdbioscie	
BD Biosciences bdbiosciences.com United States 877.232.8995 For country-specific contact	Europe Japan Asia Pacific Latin America/Carib 0 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157 information, visit bdbiosciences.com/how_to_order/	ubean	😌 BE

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD

References

Ashman LK, Buhring HJ, Aylett GW, Broudy VC, Muller C. Epitope mapping and functional studies with three monoclonal antibodies to the c-kit receptor tyrosine kinase, YB5.B8, 17F11, and SR-1. *J Cell Physiol.* 1994; 158(3):545-554. (Biology) Lerner NB, Nocka KH, Cole SR, et al. Monoclonal antibody YB5.B8 identifies the human c-kit protein product. *Blood.* 1991; 77(9):1876-1883. (Biology) Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Clone-specific)

Wypych J, Bennett LG, Schwartz MG, et al. Soluble kit receptor in human serum. Blood. 1995; 85(1):66-73. (Biology)

Yarden Y, Kuang WJ, Yang-Feng T, et al. Human proto-oncogene c-kit: a new cell surface receptor tyrosine kinase for an unidentified ligand. EMBO J. 1987; 6(11):3341-3351. (Biology)