## **Technical Data Sheet**

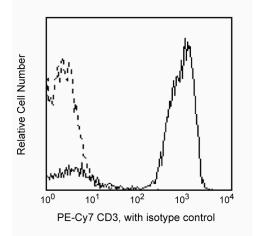
# PE-Cy<sup>™</sup>7 Mouse Anti-Human CD3

### **Product Information**

Material Number:	557749	
Size:	50 tests	
Vol. per Test:	5 μl	
Clone:	SP34-2	
Isotype:	Mouse IgG1, $\lambda$	
Reactivity:	Human	
	QC Testing: Baboon or Cynomolgus or Rhesus	
Workshop:	NA	
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.	

#### Description

Clone SP34-2 is a mouse IgG1 isotype monoclonal antibody, descendant of SP34 (mouse IgG3), with the same specificity and reactivity pattern as the parent clone. It cross-reacts with a major subset of peripheral blood lymphocytes, but not monocytes or granulocytes, of baboon, and rhesus, cynomolgus, and pigtail macaque monkeys. The distribution on lymphocytes is similar to that observed with normal human donor lymphocytes with the majority of CD3-positive cells being negative when dual stained with antibodies to B or NK cells markers. SP34-2 is also capable of inducing cell proliferation on both human and non-human primate PBMC.



Profile of peripheral blood lymphocytes of rhesus macaque (macaca mulatta) 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 with PE-Cy7 under optimum conditions, and unconjugated antibody and free PE-Cy7 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
557872	PE-Cy <sup>™7</sup> Mouse IgG1 κ Isotype Control	100 tests	MOPC-21
<ul><li>sample (a test).</li><li>2. Since applications</li></ul>	een pre-diluted for use at the recommended Volume per Test. We vary, each investigator should titrate the reagent to obtain optimal w.bdbiosciences.com/pharmingen/protocols for technical protocols	results.	pr experimental
BD Biosciences bdbiosciences.com United States Canada 877.232.8995 888.268.54 For country-specific contact	Europe Japan Asia Pacific Latin America/Caribbe 30 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157 information, visit bdbiosciences.com/how to order/	 an	😌 BC

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation 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

- 4. PE-Cy7 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by 488-nm light and serves as an energy donor, coupled to the cyanine dye Cy7, which acts as an energy acceptor and fluoresces maximally at 780 nm. PE-Cy7 tandem fluorochrome emission is collected in a detector for fluorescence wavelengths of 750 nm and higher. Although every effort is made to minimize the lot-to-lot variation in the efficiency of the fluorochrome energy transfer, differences in the residual emission from PE may be observed. Therefore, we recommend that individual compensation controls be performed for every PE-Cy7 conjugate. PE-Cy7 is optimized for use with a single argon ion laser emitting 488-nm light, and there is no significant overlap between PE-Cy7 and FITC emission spectra. When using dual-laser cytometers, which may directly excite both PE and Cy7, we recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
- 5. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
- 6. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
- 7. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
- 8. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 9. 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.
- 10. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

#### References

Carter DL, Shieh TM, Blosser RL et al. CD56 identifies monocytes and not natural killer cells in rhesus macaques. *Cytometry*. 1999; 37(1):41-50. (Biology) Roederer M, Kantor AB, Parks DR, Herzenberg LA. Cy7PE and Cy7APC: bright new probes for immunofluorescence. *Cytometry*. 1996; 24(3):191-197. (Biology) Sancho J, Ledbetter JA, Choi MS, Kanner SB, Deans JP, Terhorst C. CD3-zeta surface expression is required for CD4-p56lck-mediated upregulation of T cell antigen receptor-CD3 signaling in T cells. *J Biol Chem*. 1992; 267(11):7871-7879. (Biology)

Schlossman S, Boumell L, et al, ed. Leucocyte Typing V. New York: Oxford University Press; 1995. (Biology)

Wilson AD, Shooshtari M, Finerty S, Watkins P, Morgan AJ. Selection of monoclonal antibodies for the identification of lymphocyte surface antigens in the New World primate Saguinus oedipus oedipus (cotton top tamarin). J Immunol Methods. 1995; 178(2):195-200. (Biology)