

## Technical Data Sheet

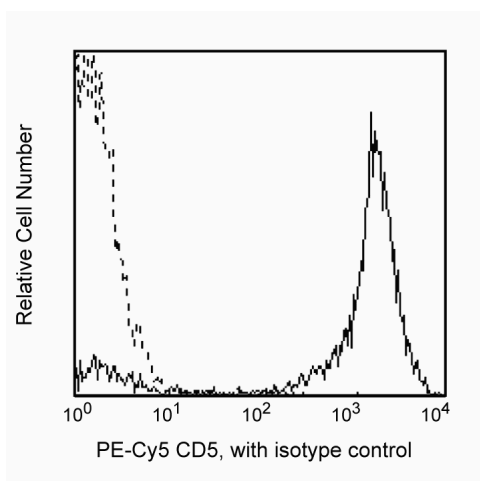
## PE-Cy™5 Mouse Anti-Human CD5

## Product Information

Material Number:	555354
Size:	100 tests
Vol. per Test:	20 µl
Clone:	UCHT2
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	III 518
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The UCHT2 monoclonal antibody specifically binds to CD5. CD5 is a 67 kDa single-chain, type 1 transmembrane glycoprotein expressed on most thymocytes, the majority of peripheral T lymphocytes and a subpopulation of B cells. CD72 has been shown to be the natural ligand for CD5. CD5+ B cells produce polyreactive antibodies (mostly IgM).



Profile of peripheral blood lymphocytes 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-Cy5 (formerly known as BD Cy-Chrome™) under optimum conditions, and unconjugated antibody and free PE-Cy5 were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555750	PE-Cy™5 Mouse IgG1 κ Isotype Control	100 tests	MOPC-21

## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. PE-Cy5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the PE-Cy5 tandem fluorochrome, extra care must be taken when using dual-laser cytometers which may directly excite both PE and Cy5™.

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6. 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.
7. PE-Cy5 is a tandem fluorochrome composed of R-phycoerythrin (PE), which is excited by the 488 nm light of an Argon ion laser and serves as an energy donor, coupled to the cyanine dye Cy5, which acts as an energy acceptor and fluoresces at 670 nm. BD Biosciences Pharmingen has maximized the fluorochrome energy transfer in PE-Cy5, thus maximizing its fluorescence emission intensity, minimizing residual emission from PE, and minimizing lot-to-lot variation.
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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

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- Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)
- Lankester AC, van Schijndel GM, Cordell JL, van Noesel CJ, van Lier RA. CD5 is associated with the human B cell antigen receptor complex. *Eur J Immunol*. 1994; 24(4):812-816. (Biology)
- Lydyard PM, Lamour A, MacKenzie LE, Jamin C, Mageed RA, Youinou P. CD5+ B cells and the immune system. *Immunol Lett*. 1993; 38(2):159-166. (Biology)
- McMichael AJ, Beverly PCL, Gilks W, et al, ed. *Leucocyte Typing III: White Cell Differentiation Antigens*. New York: Oxford University Press; 1987. (Clone-specific)
- Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Biology)