Technical Data Sheet

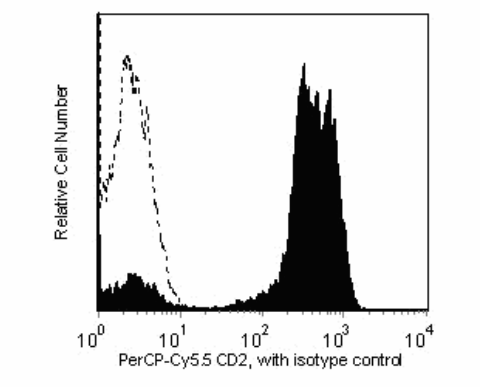
PerCP-Cy™5.5 Mouse Anti-Human CD2

Product Information

Material Number:	**560643**
Size:	50 tests
Vol. per Test:	5 µl
Clone:	RPA-2.10
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV T085
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

CD2 reacts with the 50 kDa single-chain transmembrane glycoprotein, also known as LFA-2 or the receptor for sheep erythrocytes. CD2 belongs to the immunoglobulin superfamily of proteins along with its ligand LFA-3, CD58. It is present on about 80-90% of human peripheral blood lymphocytes, greater than 95% of thymocytes, all T lymphocytes that form E-rosettes and a subset of NK cells. CD2 plays a role in T-cell signaling and in lymphocyte adhesion.



Flow cytometric analysis of CD2 on human lysed whole blood. *Human lysed whole blood was stained with the PerCP-Cy™5.5 Mouse Anti-Human CD2 antibody (shaded) or with a PerCP-Cy™5.5 Mouse IgG1, κ isotype control (unshaded). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry system.*

Preparation and Storage

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

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

The antibody was conjugated with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
550795	PerCP-Cy™5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 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. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
4. This PerCP-conjugated product is sold under license to the following patent: US Patent No. 4,876,190.
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.

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7. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
8. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
9. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
10. 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.
11. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
12. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Hahn WC, Burakoff SJ, Bierer BE. Signal transduction pathways involved in T cell receptor-induced regulation of CD2 avidity for CD58. *J Immunol.* 1993; 150(7):2607-2619. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)

Sopper S, Stahl-Hennig C, Demuth M, Johnston IC, Dorries R, ter Meulen V. Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. *Cytometry.* 1997; 29(4):351-362. (Biology)