Technical Data Sheet

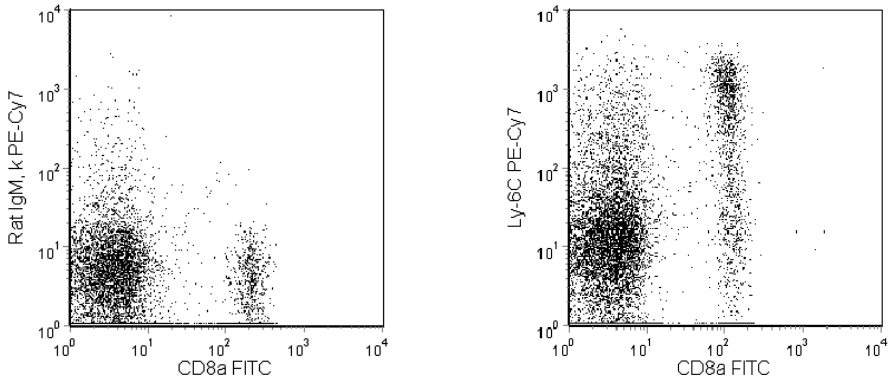
PE-Cy™7 Rat Anti-Mouse Ly-6C

Product Information

Material Number:	**560593**
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	AL-21
Immunogen:	Not reported
Isotype:	Rat IgM, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The AL-21 monoclonal antibody specifically binds to a non-polymorphic determinant of Ly-6C, a 14-17 kDa GPI-linked cell-surface antigen found on some monocyte/macrophage populations, granulocytes, endothelial cells, plasma cells, and thymocyte, NK-cell, and T-subsets. Mice with the Ly-6.2 alloantigen (eg, AKR, C57BL, C57BR, C57L, C58, DBA/2, PL, SJL, SWR, 129) have subsets of CD8+ and CD4+ Ly-6C+ T cells, while Ly-6.1 strains (eg, A, BALB/c, CBA, C3H/He, DBA/1, NZB) have only CD8+ Ly-6C+ T cells. Upregulation of Ly-6C expression on CD8+ T cells by interferons α and β and poly (I:C) has been described, and Ly-6C is a memory marker on CD8+ T cells.



Flow cytometric analysis of Ly-6C on mouse splenocytes. *Splenocytes from BALB/c mice were stained either with a PE-Cy™7 Rat IgM, κ isotype control (left panel) or with the PE-Cy™7 Rat Anti-Mouse Ly-6C antibody (right panel) in conjunction with a FITC Rat Anti-Mouse CD8a antibody. Dot plots were derived from gated events based on light scattering characteristics for splenocytes. 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 PE-Cy7 under optimum conditions, and unconjugated antibody and free PE-Cy7 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560572	PE-Cy™7 Rat IgM, κ Isotype Control	0.1 mg	R4-22
553031	FITC Rat Anti-Mouse CD8a	0.5 mg	53-6.7

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Warning: Some APC-Cy7 and PE-Cy7 conjugates show changes in their emission spectrum with prolonged exposure to formaldehyde. If you are unable to analyze fixed samples within four hours, we recommend that you use BD™ Stabilizing Fixative (Cat. No. 338036).
4. 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.
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. 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.
8. 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.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
10. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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