Technical Data Sheet

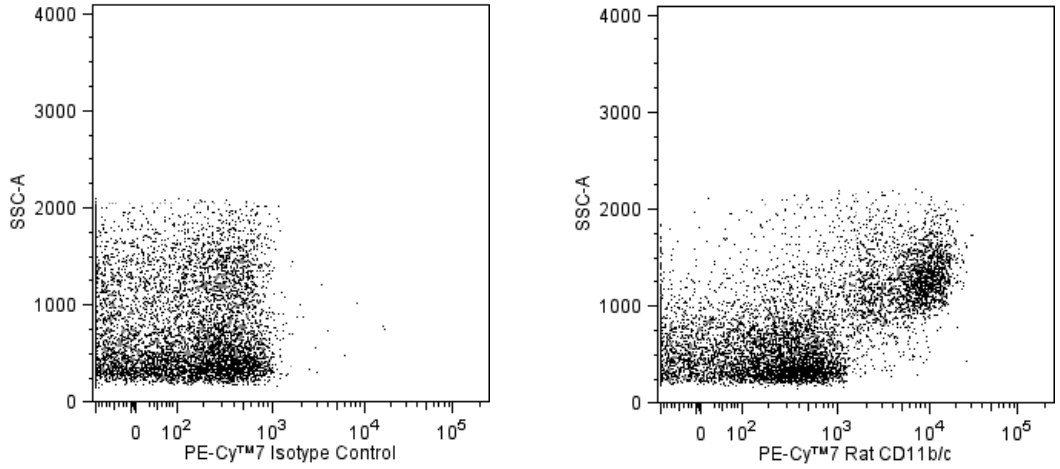
PE-Cy™7 Mouse Anti-Rat CD11b/c

Product Information

Material Number:	**562222**
Alternate Name:	Itgam/Integrin, alpha M, C3bi receptor, CR3; Itgad/Integrin, alpha D
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	OX-42
Immunogen:	Resident peritoneal cells from (PVG.RT1[c] x PVG.RT1[u]) and (PVG.RT1[c] x PVG.RT1[a]) F1-hybrid rat
Isotype:	Mouse (BALB/c) IgG2a, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The OX-42 monoclonal antibody specifically binds to the CR3 complement (C3bi) receptor found on most monocytes, granulocytes, macrophages, dendritic cells, and microglia. It appears to recognize a common epitope shared by CD11b and CD11c (integrin αM and αX chains). OX-42 antibody inhibits C3bi binding activity.



Flow cytometric analysis of CD11b/c expression on rat bone marrow cells. *Lewis rat bone marrow cells were stained with either PE-Cy™7 Mouse IgG2a, κ Isotype Control (Cat. No. 552868, Left Panel) or a PE-Cy™7 Mouse anti-Rat CD11b/c antibody (Cat. No. 562222, Right Panel). Two-parameter flow cytometric dot blots showing side-scattered light signals versus CD11b/c (or Ig Isotype Control staining) were derived from gated events with the forward light-scatter characteristics of viable bone marrow cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer 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
552868	PE-Cy™7 Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178
554656	Stain Buffer (FBS)	500 ml	(none)

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Product Notices

1. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
2. 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.
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. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
6. 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).
7. 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.
8. 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.
9. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
10. An isotype control should be used at the same concentration as the antibody of interest.

References

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Shinoda M, Hoffer BJ, Olson L. Interactions of neurotrophic factors GDNF and NT-3, but not BDNF, with the immune system following fetal spinal cord transplantation. *Brain Res.* 1996; 722(1-2):153-167. (Biology)

Tamatani T, Kotani M, Miyasaka M. Characterization of the rat leukocyte integrin, CD11/CD18, by the use of LFA-1 subunit-specific monoclonal antibodies. *Eur J Immunol.* 1991; 21(3):627-633. (Biology)

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