Technical Data Sheet

APC-Cy™7 Mouse Anti-Rat CD45

Product Information

Material Number: Alternate Name: **Entrez Gene ID:** Size: **Concentration:** Clone: Immunogen:

Isotype: **Reactivity: Storage Buffer:** 561586 Ptprc; Lca; Leucocyte common antigen; RT7; T200 24699 50 µg 0.2 mg/ml OX-1 Leukocyte Common Antigen-enriched Glycoprotein Fraction from Wistar Rat Thymocytes Mouse (BALB/c) IgG1, ĸ QC Testing: Rat Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The OX-1 antibody reacts with all molecular forms of CD45 (Leukocyte Common Antigen) on all hematopoietic cells except erythrocytes. CD45 is a member of the Protein Tyrosine Phosphatase (PTP) family: Its intracellular (COOH-terminal) region contains two PTP catalytic domains, and the extracellular region is highly variable due to alternative splicing of exons 4, 5, and 6 (designated A, B, and C, respectively), plus differing levels of glycosylation. The CD45 isoforms detected in the rat are cell type-, maturation-, and activation state-specific. The CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.



Flow cytometric analysis of CD45 expression on rat splenocytes. Splenocytes from a Lewis rat were stained with APC-Cy™7 Mouse Anti-Rat CD45 antibody (Cat. No. 561586; solid line histogram) or with a APC-Cy™7 Mouse IgG1, ĸ Isotype Control (Cat. No. 557873; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable splenocytes. 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 APC-Cy7 under optimum conditions, and unconjugated antibody and free APC-Cy7 were removed.

Application Notes

Application							
Flow cytometry Routinely Tester							
Suggeste	d Compani	on Product	ts				
Catalog Number		Name				Size	Clone
557873		APC-Cy™7 Mouse IgG1, κ Isotype Control			Control	0.1 mg	MOPC-21
554656		Stain Buffer (FBS)				500 ml	(none)
BD Biosci	ences						
bdbiosciences.	com						
United States 877.232.8995	Canada 888.268.5430	Europe 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Caribbean 0800.771.7157		
For country-sp	ecific contact in	formation, visit	bdbiosciences.co	m/how_to_orde	r/		
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Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. APC-Cy7 is a tandem fluorochrome composed of Allophycocyanin (APC), which is excited by laser lines between 595 and 647 nm and serves as an energy donor, coupled to the cyanine dye Cy7TM, which acts as an energy acceptor and fluorescess at 780 nm. BD Biosciences Pharmingen has maximized the fluorochrome energy transfer in APC-Cy7, thus maximizing its fluorescence emission intensity, minimizing residual emission from APC, and minimizing required electronic compensation in multilaser-laser flow cytometry systems. Note: Although every effort is made to minimize the lot-to-lot variation in residual emission from APC, it is strongly recommended that every lot be tested for differences in the amount of compensation required and that individual compensation controls are run for each APC-Cy7 conjugate.
- 3. APC-Cy7 tandem fluorochrome emission is collected in a detector for fluorescence wavelengths of 750 nm and higher.
- 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. 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.
- 6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 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 BDTM Stabilizing Fixative (Cat. No. 338036).
- 8. 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.
- 9. This conjugated product is sold under license to the following patent: US Patent No. 5,714,386.
- 10. 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.
- 11. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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