Technical Data Sheet

PerCP-Cy[™]5.5 Mouse Anti-Human CD47

Product Information

Material Number: 561261

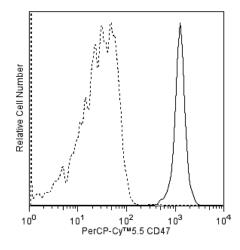
Alternate Name: IAP; CDw149; gp42; MER6; Neurophilin; OA3; Rh-related antigen

Size $5 \mu l$ Vol. per Test: B6H12 Clone: Mouse IgG1, κ Isotype: Reactivity: QC Tested: Human Workshop: BP400/V S271

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The B6H12 monoclonal antibody specifically binds to a 42-52 kDa N-linked glycan protein. CD47 antigen, also known as integrin-associated protein (IAP), is expressed on all hematopoietic cells, including leukocytes, platelets and erythrocytes. It is also expressed on epithelial cells, endothelial cells, fibroblasts and many tumor cell lines. CD47 may play a role as a signal transducer in the regulation of cation fluxes across cell membranes and in the chemotactic and adhesive interactions of leukocytes with endothelial cells. The B6H12 antibody is capable of blocking phagocytosis of microparticles by peripheral blood granulocytes. It has also been reported to induce proliferation of CD3-activated T cells.



Flow cytometric analysis of CD47 expression on human peripheral blood lymphocytes. Whole blood was stained with PerCP-Cy™5.5 Mouse anti-Human CD47 antibody (Cat. No. 561261; solid line histogram) or with a PerCP-Cy[™]5.5 Mouse IgG1, κ Isotype Control (Cat. No. 550795; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

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

Application Notes

Application

Flow cytometry Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone	
550795	PerCP-Cy TM 5.5 Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21	
555899	Lysing Buffer	100 ml	(none)	
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.
- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ cells in a 100-µl experimental sample (a test).
- 3. An isotype control should be used at the same concentration as the antibody of interest.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 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.
- 6. 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.
- 7. 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.
- 8. This PerCP-conjugated product is sold under license to the following patent: US Patent No. 4,876,190.
- 9. 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 Cy5.5TM. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
- 10. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
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References

Barclay NA, Brown MH, Birkeland ML, et al, ed. The Leukocyte Antigen FactsBook. San Diego, CA: Academic Press; 1997. (Biology)

Brown E, Hooper L, Ho T, Gresham H. Integrin-associated protein: a 50-kD plasma membrane antigen physically and functionally associated with integrins. *J Cell Biol.* 1990; 111(6):2785-2794. (Biology)

Gresham HD, Goodwin JL, Allen PM, Anderson DC, Brown EJ. A novel member of the integrin receptor family mediates Arg-Gly-Asp-stimulated neutrophil phagocytosis. *J Cell Biol.* 1989; 108(5):1935-1943. (Biology)

Kishimoto T, von dem Borne AEG, Goyert SM,et al., ed. Leucocyte Typing VI: White Cell Differentiation Antigens. London: Garland Publishing; 1997. (Clone-specific)

Lindberg FP, Gresham HD, Schwarz E, Brown EJ. Molecular cloning of integrin-associated protein: an immunoglobulin family member with multiple membrane-spanning domains implicated in alpha v beta 3-dependent ligand binding. *J Cell Biol.* 1993; 123(2):485-496. (Biology)

Lindberg FP, Lublin DM, Telen MJ, et al. Rh-related antigen CD47 is the signal-transducer integrin-associated protein. *J Biol Chem.* 1994; 269(3):1567-1570. (Biology)

Schlossman SF, Boumsell L, Gilks W, et al, ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press; 1995. (Clone-specific)

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