Technical Data Sheet

PerCP-Cy™5.5 Rat Anti-Mouse CD43

Product Information

Material Number: 562865

Alternate Name: Spn; Sialophorin; Leukosialin; Ly-48; Ly48; Galgp; LEUK

 Size:
 0.1 mg

 Concentration:
 0.2 mg/ml

 Clone:
 S7

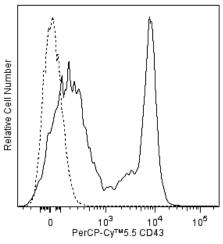
Immunogen:Mouse Plasmacytoma MOPC-315Isotype:Rat (DA x LOU) IgG2a, κ

Reactivity: QC Testing: Mouse

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

Description

The S7 monoclonal antibody specifically binds to the 115 kDa glycosylated form of CD43 (Ly-48, Leukosialin). CD43 is expressed on IL-7-responsive pro-B cells, plasma cells, peritoneal and splenic CD5+ B cells (B-1 cells), granulocytes, monocytes, macrophages, platelets, natural killer cells, thymocytes, peripheral T cytotoxic/suppressor cells, and most T helper cells, but not resting conventional peripheral B cells. CD43 expression has also been detected on pluripotent hematopoietic stem cells and myeloid, lymphoid, and NK-cell progenitors in the bone marrow. Studies of CD43-deficient mice indicate that CD43 participates in the negative regulation of T-cell activation and adhesion.



Flow cytometric analysis of CD43 expression on mouse bone marrow cells. BALB/c mouse bone marrow cells were preincubated with Purified Rat Anti-Mouse CD16/CD32 antibody (Mouse BD Fc Block™) (Cat. No. 553141/553142). The cells were then stained with either PerCP-Cy™5.5 Rat Anti-Mouse CD43 antibody (Cat. No. 562865, solid line histogram) or with PerCP-Cy™5.5 Rat IgG2a, κ Isotype Control (Cat. No. 550765, dashed line histogram). Fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable bone marrow cells. Flow cytometric analysis 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 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	
554656	Stain Buffer (FBS)	500 ml	(none)	
550765	PerCP-Cy [™] 5.5 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95	
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block TM)	0.1 mg	2.4G2	
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2	

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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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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.
- 5. 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.
- 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.
- 7. 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.
- 8. 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.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
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References

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