# **Technical Data Sheet**

# PE-Cy<sup>™</sup>7 Mouse Anti-Human CD44

# **Product Information**

560533
Phagocytic glycoprotein 1; Pgp-1; H-CAM; Hermes; ECMR III; HUTCH-1
50 Tests
5 μl
G44-26 (also known as C26)
Mouse IgG2b, ĸ
QC Testing: Human
VI A092
Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

# Description

The G44-26 monoclonal antibody specifically binds to the 80-95 kDa, glycosylated type I transmembrane protein, also known as phagocytic glycoprotein-1 (Pgp-1). CD44 is the receptor for hyaluronic acid. CD44 is expressed on leucocytes, erythrocytes, epithelial cells and weakly on platelets. CD44 is also called extracellular matrix receptor type III and has functional roles in cell migration, lymphocyte homing and adhesion during hematopoiesis and lymphocyte activation. This antibody is suitable for staining formalin-fixed, paraffin-embedded tissue sections using citrate buffer pretreatment. This antibody recognizes the epitope 1 of CD44 antigen according to the HLDA workshop studies.



Flow cytometric analysis of CD44 on human lysed whole blood. Human lysed whole blood was stained with the PE-Cy™7 Mouse Anti-Human CD44 antibody (shaded) or with a PE-Cy™7 Mouse IgG2b, κ isotype control (Cat. No. 560542, unshaded). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR Il flow cytometry system.

500 mL

(none)

### **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	Ro	utinely Tested	
Suggested Compar	nion Products		
Catalog Number	Name	Size	Clone
560542	PE-Cy <sup>TM</sup> 7 Mouse IgG2b, κ Isotype Control	0.1 mg	27-35
555899	Lysing Buffer	100 mL	(none)

### Product Notices

554656

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^{6}$  cells in a 100-µl experimental sample (a test).

2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

Stain Buffer (FBS)

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<sup>™</sup> Stabilizing Fixative (Cat. No. 338036).

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- 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.
- 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.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States. 6.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before 7. discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 9. An isotype control should be used at the same concentration as the antibody of interest.

#### References

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