Technical Data Sheet

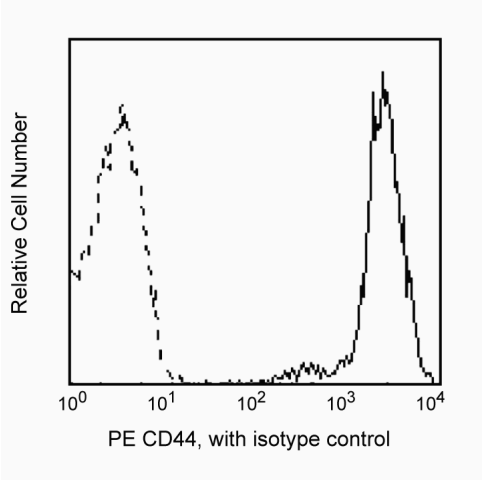
PE Mouse Anti-Human CD44

Product Information

Material Number:	**550989**
Alternate Name:	Pgp-1; CSPG8; ECMR-III; Epican; H-CAM; HCELL; Hermes; HUTCH-1
Size:	100 Tests
Vol. per Test:	20 µl
Clone:	515
Immunogen:	Human EBV-transformed Arent B Lymphoblastoid Cell Line
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 515 monoclonal antibody specifically binds to CD44. CD44 is an 80-95 kDa type I transmembrane glycoprotein, also known as Phagocytic glycoprotein-1 (Pgp-1), or Extracellular matrix receptor type III (ECMR-III). CD44 is a member of the hyaladherin family of hyaluronan-binding proteins, with structural similarities to selectins. CD44 is the receptor for hyaluronic acid. CD44 is expressed on leucocytes, erythrocytes, epithelial cells and weakly on platelets. CD44 has functional roles in cell migration, lymphocyte homing and adhesion during hematopoiesis and lymphocyte activation. The 515 monoclonal antibody can reportedly block cellular adhesion to hyaluronic acid.



Flow cytometric analysis of CD44 on human peripheral blood lymphocytes. *Whole blood was stained with either PE Mouse IgG1, κ Isotype Control (Cat. No. 555749; dashed line histogram) or PE Mouse Anti-Human CD44 (Cat. No. 550989; solid line histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Fluorescent histograms were derived from gated events based on the light scattering characteristics for viable lymphocytes.*

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 R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
349202	BD FACS™ Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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 Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Patel DD, Liao HX, Haynes BF. CD44 workshop panel report. In: Kishimoto T. Tadamitsu Kishimoto .. et al., ed. *Leucocyte typing VI : white cell differentiation antigens : proceedings of the sixth international workshop and conference held in Kobe, Japan, 10-14 November 1996.* New York: Garland Pub.; 1997:373-375. (Biology)

Oostendorp RAJ, Spitzer E, Reisbach G, Dörmer P. CD44 Workshop: CD44 modulates adhesive behavior of hematopoietic progenitor cells. In: Kishimoto T. Tadamitsu Kishimoto .. et al., ed. *Leucocyte typing VI : white cell differentiation antigens : proceedings of the sixth international workshop and conference held in Kobe, Japan, 10-14 November 1996.* New York: Garland Pub.; 1997:378-379. (Clone-specific)

Kansas GS, Muirhead MJ, Dailey MO. Expression of the CD11/CD18, leukocyte adhesion molecule 1, and CD44 adhesion molecules during normal myeloid and erythroid differentiation in humans. *Blood.* 1990; 76(12):2483-2492. (Biology)

Kansas GS, Tedder TF. Transmembrane signals generated through MHC class II, CD19, CD20, CD39, and CD40 antigens induce LFA-1-dependent and independent adhesion in human B cells through a tyrosine kinase-dependent pathway. *J Immunol.* 1991; 147(12):4094-4102. (Biology)

Kansas GS, Wood GS, Dailey MO. A family of cell-surface glycoproteins defined by a putative anti-endothelial cell receptor antibody in man. *J Immunol.* 1989; 142(9):3050-7. (Immunogen)