

Technical Data Sheet

PE Mouse Anti-Human CD59

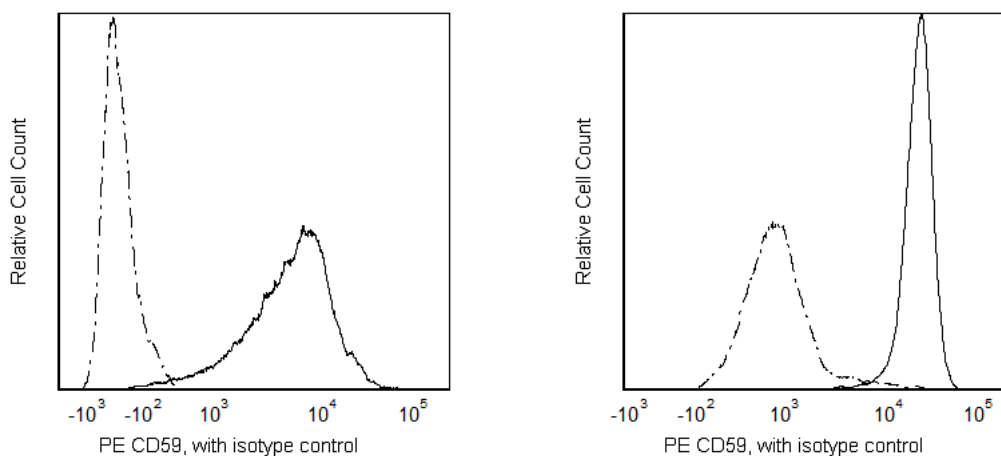
Product Information

Material Number:	555764
Alternate Name:	HRF-20; MAC-inhibitory protein; MAC-IP; MACIF; MEM43; MIRL; Protectin; 1F5
Size:	100 Tests
Vol. per Test:	20 µl
Clone:	p282 (H19)
Immunogen:	Human Erythrocytes
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon
Workshop:	V S006
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The p282 (H19) monoclonal antibody specifically binds to CD59, a 19 kDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein, expressed on hematopoietic and non-hematopoietic cells. Because of its interaction with complement activated products, CD59 has been termed membrane-attack-complex-inhibitory factor (MACIF), homologous restriction factor (HRF20), membrane inhibitor of reactive lysis (MIRL) and Protectin. It inhibits the cytolytic activity of the complement system by binding to C8 and C9, thereby blocking the assembly of the membrane attack complex. CD59 also participates in spontaneous T-cell/erythrocyte adhesion, interacts with CD2, and plays a role in T-cell activation.

Clone p282 also cross-reacts with peripheral blood leukocytes of baboon and both rhesus and cynomolgus macaque monkeys. The distribution of leukocytes is similar to that observed with peripheral blood leukocytes from normal human donors, with all populations, lymphocytes, monocytes and granulocytes showing reactivity to p282.



Flow cytometric analysis of CD59 expression on peripheral blood leukocytes. Human or rhesus whole blood was lysed with BD FACSTM Lysing Solution (Cat. No. 349202), then preincubated with Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) (Cat. No. 553141/553142). The cells were then stained with either PE Mouse IgG2a, κ Isotype Control (Cat. No. 555574; dashed line histogram) or PE Mouse Anti-Human CD59 (Cat. No. 555764/557141/560953; solid line histogram). Fluorescent histograms were derived from gated events with the side and forward light-scattering characteristics of human lymphocytes (Left Panel) or rhesus granulocytes (Right Panel). Flow cytometry was performed on a BD LSRFortessa™ X-20 system.

BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 866.979.9408 Europe 32.2.400.98.95 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.
© 2017 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.



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
555574	PE Mouse IgG2a, κ Isotype Control	100 Tests	G155-178
557141	PE Mouse Anti-Human CD59	50 Tests	p282 (H19)
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
560953	PE Mouse Anti-Human CD59	25 Tests	p282 (H19)
349202	BD FACSTM Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2

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. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
7. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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

Davies A, Lachmann PJ. Membrane defence against complement lysis: the structure and biological properties of CD59. *Immunol Res.* 1993; 12(3):258-275. (Biology)

Deckert M, Kubar J, Bernard A. CD58 and CD59 molecules exhibit potentializing effects in T cell adhesion and activation. *J Immunol.* 1992; 148(3):672-677. (Biology)

Deckert M, Kubar J, Zoccola D, et al. CD59 molecule: a second ligand for CD2 in T cell adhesion. *Eur J Immunol.* 1992; 22(11):2943-2947. (Biology)

Kishimoto T, Tadimitsu 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(Biology)

Schlossman SF, Stuart F, Schlossman .. et al., ed. *Leucocyte typing V : white cell differentiation antigens : proceedings of the fifth international workshop and conference held in Boston, USA, 3-7 November, 1993*. Oxford: Oxford University Press; 1995(Clone-specific)

Whitlow MB, Iida K, Stefanova I, Bernard A, Nussenzweig V. H19, a surface membrane molecule involved in T-cell activation, inhibits channel formation by human complement. *Cell Immunol.* 1990; 126(1):176-184. (Biology)