

Technical Data Sheet

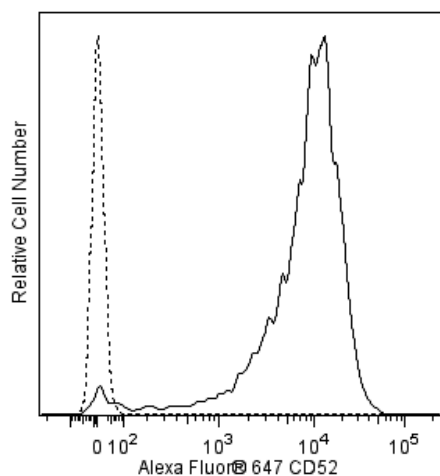
Alexa Fluor® 647 Mouse Anti-Human CD52

Product Information

Material Number:	563610
Alternate Name:	Cambridge pathology 1 Ag; CAMPATH-1; Epididymal secretory protein E5; HE5
Size:	50 tests
Vol. per Test:	5 µl
Clone:	4C8
Immunogen:	Human T Lymphocytes
Isotype:	Mouse (BALB/c) IgG3, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The 4C8 monoclonal antibody specifically binds to CD52 which is also known as Cambridge pathology 1 antigen (CAMPATH-1) or Human epididymis-specific protein 5 (HE5). CD52 is a highly N-glycosylated, 25-29 kDa protein whose C-terminus is glycosylphosphatidylinositol anchored in the membrane. It is highly expressed on the surface of thymocytes and mature lymphocytes but not on their stem cell precursors. It is also expressed on monocytes, dendritic cells, eosinophils and epithelial cells of the epididymis and seminal vesicles but not on neutrophils, plasma cells, platelets or erythrocytes. Although its functional role is not well characterized, the CD52 antigen serves as an exquisitely sensitive target antigen for antibody and complement-mediated lysis of CD52-positive cells. Anti-CD52 antibodies are being used clinically to remove lymphocytes from transplanted bone marrow cell preparations and in the treatment of some malignant diseases.



Flow cytometric analysis of human CD52 expression on human peripheral blood lymphocytes. Whole blood was stained with either Alexa Fluor® 647 Mouse IgG3, κ Isotype Control (Cat. No. 560803; dashed line histogram) or Alexa Fluor® 647 Mouse Anti-Human CD52 antibody (Cat. No. 563610; solid line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. 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 to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
----------------	------------------

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
560803	Alexa Fluor® 647 Mouse IgG3, κ Isotype Control	0.1 mg	J606
555899	Lysing Buffer	100 ml	(none)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	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.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



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- μ l experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
8. 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.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Masuyama J, Yoshio T, Suzuki K, et al. Characterization of the 4C8 antigen involved in transendothelial migration of CD26(hi) T cells after tight adhesion to human umbilical vein endothelial cell monolayers. *J Exp Med.* 1999; 189(6):979-990. (Immunogen: Blocking, Flow cytometry, Stimulation, Western blot)
Zola H, Swart B, Nicholson I, Voss E. *Leukocyte and Stromal Cell Molecules. The CD Markers.* Hoboken, New Jersey: John Wiley & Sons, Inc.; 2007:1-581. (Biology)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	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.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

