## **Technical Data Sheet**

# Alexa Fluor® 700 Mouse Anti-Human CD45RA

#### **Product Information**

560673 **Material Number:** 50 tests Size: 5 µl Vol. per Test: HI100 Clone:

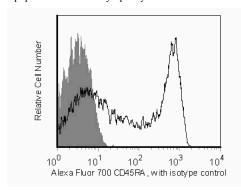
Isotype: Mouse IgG2b, κ Reactivity: QC Testing: Human

IV N906 Workshop:

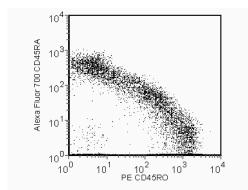
Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

### Description

The HI100 monoclonal antibody specifically binds to the 220 kDa isoform of the human leukocyte common antigen, CD45RA. CD45RA is expressed on approximately 40-50% of peripheral CD4+ T cells, 50% of peripheral CD8+ T cells and on a portion of B cells and monocytes. The CD45RA antigen is expressed by naïve and activated T cells. CD45RA-specific antibodies are useful for the study of the suppressor/inducer subpopulation of CD4+ lymphocytes.



Flow cytometric analysis of CD45RA on human lysed whole blood. Human lysed whole blood was stained with the Alexa Fluor® 700 Mouse Anti-Human CD45RA antibody (unshaded) or with a Alexa Fluor® 700 Mouse IgG2b, κ isotype control (shaded). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry system.



Flow cytometric analysis of CD45RA on human lysed whole blood. Human lysed whole blood was stained with the Alexa Fluor® 700 Mouse Anti-Human CD45RA antibody in conjunction with a PE Mouse Anti-Human CD45RO antibody (Cat. No. 555493). Dot plots were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry 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® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

## **Application Notes**

Application

Flow cytometry Routinely Tested

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
560543	Alexa Fluor® 700 Mouse IgG2b, κ Isotype Control	0.1 mg	27-35	
555493	PE Mouse Anti-Human CD45RO	100 tests	UCHL1	
555899	Lysing Ruffer	100 ml	(none)	

## **BD Biosciences**

bdbiosciences.com

**United States** 877.232.8995 888.268.5430 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how\_to\_order/

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



Page 1 of 2 560673 Rev. 1

#### **Product Notices**

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> 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. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
- 4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- 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.
- 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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 8. Please refer to www.bdbiosciences.com/pharmingen/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)

Johnson P, Maiti A. CD45: A family of leukocyte-specific cell surface glycoproteins. In: Herzenberg LA, Weir DM, Blackwell C, ed. *Weir's Handbook of Experimental Immunology, Vol 2*. Cambridge: Blackwell Science; 1997:62.1-62.16. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)

Picker LJ, Treer JR, Ferguson-Darnell B, Collins PA, Buck D, Terstappen LW. Control of lymphocyte recirculation in man. I. Differential regulation of the peripheral lymph node homing receptor L-selectin on T cells during the virgin to memory cell transition. *J Immunol*. 1993; 150(3):1105-1121. (Biology)

Schwinzer R. Cluster Report: CD45/CD45R. In: Knapp W, Dorken B, Rieber EP, et al, ed. *Leukocyte Typing IV*: *White Cell Differentiation Antigens*. New York: Oxford University Press; 1989:628-634. (Biology)

560673 Rev. 1 Page 2 of 2