# **Technical Data Sheet**

# PerCP-Cy™5.5 Mouse Anti-Human CD45RO

### **Product Information**

Material Number:	560607		
Size:	50 tests		
Vol. per Test:	5 μl		
Clone:	UCHL1		
Isotype:	Mouse (BALB/c) IgG2a, κ		
Reactivity:	QC Testing: Human		
Workshop:	IV N31		
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.		
Clone: Isotype: Reactivity: Workshop: Storage Buffer:	UCHL1 Mouse (BALB/c) IgG2a, κ QC Testing: Human IV N31 Aqueous buffered solution containing BSA and ≤0.09% sodium azide		

#### Description

The UCHL1 monoclonal antibody specifically reacts with the 180 kDa isoform of CD45 (aka, the Leukocyte Common Antigen). CD45RO is a type I transmembrane glycoprotein that has cytoplasmic protein tyrosine phosphatase activity and functions in signal transduction pathways. This CD45 isoform does not include amino acid sequences encoded by the variable CD45 exons A, B, or C. CD45RO is expressed on most thymocytes, activated T cells, memory T cells, granulocytes and monocytes, but only on a proportion of resting T cells. CD45RO and CD45RA antibodies seem to define complementary, predominantly non-overlapping, populations in resting peripheral T cells, demonstrating heterogeneity within the CD8 and CD4 subpopulations. CD45RO binds to CD22.



Flow cytometric analysis of CD45RO on human lysed whole blood. Human lysed whole blood was stained with the PerCP-Cy™5.5 Mouse Anti-Human CD45RO antibody (unshaded) or with a PerCP-Cy™5.5 Mouse IgC2a, 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 CD45RO on human lysed whole blood. Human lysed whole blood was stained with the PerCP-Cy™5.5 Mouse Anti-Human CD45RO antibody in conjunction with a FITC Mouse Anti-Human CD45RA antibody (Cat.No. 555488). 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 with PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

#### **Application Notes**

Flow cytometry	Routinely Tested					
Suggested Compar	nion Products					
Catalog Number	Name	Size	Clone			
550927	PerCP-Cy <sup>™</sup> 5.5 Mouse IgG2a, к Isotype Control	0.1 mg	G155-178			
555899	Lysing Buffer	100 ml	(none)			
555488	FITC Mouse Anti-Human CD45RA	100 tests	HI100			
Product Notices						
BD Biosciences						

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- 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. An isotype control should be used at the same concentration as the antibody of interest.
- 3. 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.
- 4. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
- 5. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
- 6. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5<sup>TM</sup>. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
- 7. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
- 8. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 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.
- 10. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 11. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

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