

## Human CD3ε mFluor™ Violet 450-Conjugated Antibody

Monoclonal Mouse IgG<sub>1</sub> Clone # UCHT1 Catalog Number: FAB100MFV450

DESCRIPTION			
Species Reactivity	Human		
Specificity	Recognizes the ε-chain of the CD3/T cell antigen receptor complex.		
Source	Monoclonal Mouse IgG <sub>1</sub> Clone # UCHT1		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Human thymocytes (1)		
Conjugate	mFluor™ Violet 450 Excitation Wavelength: 406 nm Emission Wavelength: 445 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet		

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.	

(SDS) for additional information and handling instructions.

	Recommended Concentration	Sample
Flow Cytometry	5 μL/10 <sup>6</sup> cells	PBMC lymphocytes

DATA		
Flow Cytometry	Detection of CD3ε in PBMC Jymphocytes by Flow Cytometry. PBMC lymphocytes were stained with Mouse Anti-Human CD19 PE-conjugated Monoclonal Antibody (Catalog # FAB4867P) and either (A) Mouse Anti-Human CD3ε mFluor™ Violet 450- Conjugated Monoclonal Antibody (Catalog # FAB100MFV450 or (B) unstained. View our protocol for Staining Membrane- associated Proteins.	
PREPARATION AND S	TORAGE	
Shipping	The product is shipped with polar packs. Upon receipt, sto	re it immediately at the temperature recommended below.
Stability & Storage	Do not freeze. • 12 months from date of receipt, 2 to 8 °C as suppli	ed

## BACKGROUND

CD3 $\epsilon$  is a key signaling molecule that participates in the formation of the T Cell Receptor (TCR). The  $\alpha\beta$  TCR is composed of six distinct subunits. There is an  $\alpha$ - $\beta$  disulfide-linked heterodimer that recognizes antigen, and this is accompanied by four CD3 subunits that transduce an intracellular signal. CD3 $\epsilon$  forms a heterodimer with both CD3 $\gamma$  and CD3 $\delta$ , creating two signaling complexes. These two heterodimers are supplemented by a CD3 $\zeta\zeta$  homodimer that lies in the center of the TCR complex, generating a fully-functional TCR (2).

## References:

- 1. Beverly, P.C.L. and R.E. Callard (1981) Eur. J. Immunol. 11:329.
- 2. Call, M.E. and K.W. Wucherpfennig (2005) Annu. Rev. Immunol. 23:101.
- 3. McMichael, A.J. et al. (1987) Leucocyte Typing III: White Cell Differentiation Antigens, Oxford University Press, New York.
- 4. Knapp, W. et al. (1989) Leucocyte Typing IV: White Cell Differentiation Antigens, Oxford University Press, New York.
- 5. Schlossman, S. et al. (1995) Leucocyte Typing V: White Cell Differentiation Antigens, Oxford University Press, New York.

## PRODUCT SPECIFIC NOTICES

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