## CD8α (RPA-T8) Mouse mAb (violetFluor<sup>™</sup> 450 Conjugate)



Orders:	877-616-CELL (2355) orders@cellsignal.com			
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Web:	info@cellsignal.com cellsignal.com			

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications: FC-FP, FC-L	Reactivity: H	<b>Sensitivity:</b> Endogenous	Source/Isotype: Mouse IgG1	UniProt ID: #P01732	Entrez-Gene Id: 925		
Product Usage Information		Application Flow Cytometry (Fixed/Permeabilized) Flow Cytometry (Live)			<b>Dilution</b> 1:20 1:20		
Storage		Supplied in 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH 7.2. This product is stable for 12 months when stored at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.					
Specificity/Sensi	itivity	CD8α (RPA-T8) Mouse mAb (violetFluor™ 450 Conjugate) recognizes endogenous levels of total CD8α protein. This antibody detects an epitope within the extracellular domain.					
Source / Purifica	ation	This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation.					
Description		This Cell Signaling Technology antibody is conjugated to violetFluor™ 450 and tested in-house for direct flow cytometric analysis in human cells.					
Background		Cluster of Differentiation 8 (CD8) is a disulphide-linked heterodimer consisting of the unrelated $\alpha$ and $\beta$ subunits. Each subunit is a glycoprotein composed of a single extracellular Ig-like domain, a polypeptide linker, a transmembrane part and a short cytoplasmic tail. On T cells, CD8 is the coreceptor for the T cell receptor (TCR), and these two distinct structures recognize the Antigen–Major Histocompatibility Complex (MHC). Specifically, the Ig-like domain of CD8 $\alpha$ interacts with the $\alpha$ 3-domain of the MHC class I molecule. CD8 ensures specificity of the TCR–antigen interaction, prolongs the contact between the T cell and the antigen presenting cell, and the $\alpha$ chain recruits the tyrosine kinase Lck, which is essential for T cell activation (1). The RPA-T8 antibody is widely used as a phenotypic marker for CD8 on cytotoxic T cells and thymocytes (2,3), as well as on certain cell types that do not express the TCR, including some NK cells (4).					
Background Ref	erences	1. Zamoyska, R. (1994) <i>Immunity</i> 1, 243-46. 2. Friberg, H. et al. (2011) <i>Immunol Cell Biol</i> 89, 122-9. 3. Reissfelder, C. et al. (2015) <i>J Clin Invest</i> 125, 739-51. 4. Addison, E.G. et al. (2005) <i>Immunology</i> 116, 354-61.					
Species Reactivi	ty	Species reactivity is dete	rmined by testing in at le	ast one approved ap	plication (e.g., western blot).		
Applications Key	/	FC-FP: Flow Cytometry (Fixed/Permeabilized) FC-L: Flow Cytometry (Live)					
Cross-Reactivity	Key	H: Human					
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