

#86135  
store at +4C**CD8 $\alpha$  (RPA-T8) Mouse mAb (redFluor™ 710 Conjugate)**

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

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> FC-FP, FC-L	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Mouse IgG1	<b>UniProt ID:</b> #P01732	<b>Entrez-Gene Id:</b> 925
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<b>Product Usage Information</b>	<b>Application</b> Flow Cytometry (Fixed/Permeabilized) Flow Cytometry (Live)	<b>Dilution</b> 1:20 1:20
<b>Storage</b>	Supplied in 10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% NaN <sub>3</sub> , 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.	
<b>Specificity/Sensitivity</b>	CD8 $\alpha$ (RPA-T8) Mouse mAb (redFluor™ 710 Conjugate) recognizes endogenous levels of total CD8 $\alpha$ protein. This antibody detects an epitope within the extracellular domain.	
<b>Source / Purification</b>	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.	
<b>Description</b>	This Cell Signaling Technology antibody is conjugated to redFluor™ 710 and tested in-house for direct flow cytometric analysis in human cells.	
<b>Background</b>	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).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Zamoyska, R. (1994) <i>Immunity</i> 1, 243-46.</li> <li>2. Friberg, H. et al. (2011) <i>Immunol Cell Biol</i> 89, 122-9.</li> <li>3. Reissfelder, C. et al. (2015) <i>J Clin Invest</i> 125, 739-51.</li> <li>4. Addison, E.G. et al. (2005) <i>Immunology</i> 116, 354-61.</li> </ol>	
<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
<b>Applications Key</b>	<b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized) <b>FC-L:</b> Flow Cytometry (Live)	
<b>Cross-Reactivity Key</b>	<b>H:</b> Human	
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