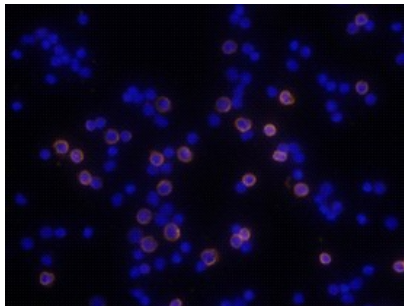
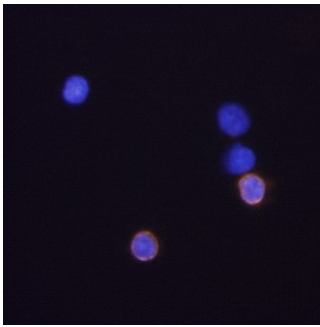


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects both the α and α' chains of mouse CD8 (1).
Source	Monoclonal Rat IgG _{2A} Clone # 53-6.7
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse thymus or spleen
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

APPLICATIONS		
<i>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.</i>		
	Recommended Concentration	Sample
Flow Cytometry	0.25 μ g/10 ⁶ cells	Mouse splenocytes
Immunocytochemistry	8-25 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Cell Depletion	Hathcock, K.S. (1991) Current protocols in immunology, pp. 3.4.1. Kruisbeek, A.M. (1991) Current protocols in immunology, pp. 4.1.1.	
Immunoprecipitation	Ledbetter, J.A. and L.A. Herzenberg (1979) Immunol. Rev. 47:63.	
Inhibition of T Cell Function	This antibody has been used for inhibition of T cell responses to IL-2 (Takahashi, K. et al., 1992, Proc. Natl. Acad. Sci. USA 89:5557 - 5561), MHC class I (Anel, A. et al., 1996, Eur. J. Immunol. 26:2310 - 2319) or antigens (Alexander-Miller, M.A. et al., 1996, J. Exp. Med. 184:485 - 492).	

DATA	
<p>Immunocytochemistry</p>  <p>CD8α in Mouse Splenocytes. CD8α was detected in immersion fixed mouse splenocytes using 10 μg/mL Rat Anti-Mouse CD8α Monoclonal Antibody (Catalog # MAB116) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>	<p>Immunocytochemistry</p>  <p>CD8α in Mouse Splenocytes. CD8α was detected in mouse splenocytes using Rat Anti-Mouse CD8α Monoclonal Antibody (Catalog # MAB116) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (yellow; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CD8, also known as Ly-2, is a heterodimeric glycoprotein consisting of an α and β chain. It is expressed on cytolytic T cells and functions in conjunction with the T cell receptor in the recognition of MHC/peptide complexes. Mouse CD8 (containing an α /Ly-2 or α /Lyt-2 chain) is an antigen co-receptor on the T cell surface which interacts with MHC I molecules on antigen presenting cells (1). CD8 $\alpha\beta$ heterodimer is expressed on a subpopulation of mature T cells (2, 3). CD8 α , without CD8 β , has been detected on subsets of $\gamma\delta$ TCR-bearing T cells (4), intestinal intrathymic lymphocytes (5, 6) and dendritic cells (7, 8).

References:

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6. Wang, J. and J.R. Klein (1994) *Science* **265**:1860.
7. Vermeec, D. *et al.* (1992) *J. Exp. Med.* **176**:47.
8. Suss, G. and K. Shortman (1996) *J. Exp. Med.* **183**:1789.