

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects recombinant mouse CD8 alpha protein in Direct ELISA.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 1104516
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line, NS0-derived mouse CD8 Lys28-Tyr196 Accession # P01731
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

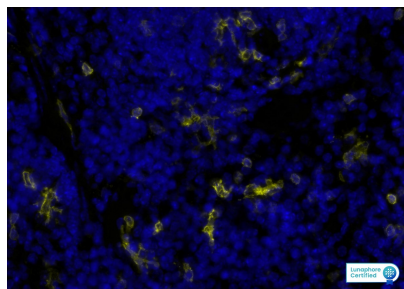
#### APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Multiplex Immunofluorescence</b>	5 µg/mL	Perfusion fixed paraffin-embedded sections of mouse spleen
<b>Immunohistochemistry</b>	3-25 µg/mL	Perfusion fixed paraffin-embedded sections of mouse spleen and thymus

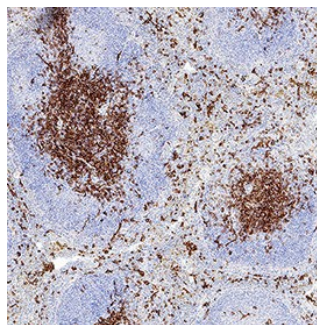
**DATA**

**Multiplex Immunofluorescence**



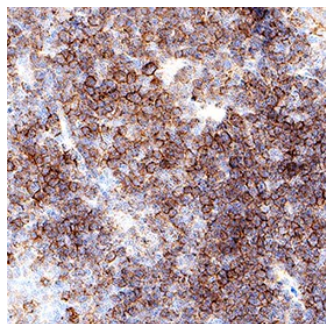
**Detection of CD8α in Mouse spleen via seqIF™ staining on COMET™** CD8α was detected in perfusion fixed paraffin-embedded sections of mouse spleen using Rat Anti-Mouse CD8α, Monoclonal Antibody (Catalog #MAB11715) at 5µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RT) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

**Immunohistochemistry**



**Detection of CD8α in Mouse Spleen.** CD8α was detected in perfusion fixed paraffin-embedded sections of mouse spleen using Rat Anti-Mouse CD8α Monoclonal Antibody (Catalog # MAB11715) at 5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**Immunohistochemistry**



**Detection of CD8α in Mouse Thymus.** CD8α was detected in perfusion fixed paraffin-embedded sections of mouse thymus using Rat Anti-Mouse CD8α Monoclonal Antibody (Catalog # MAB11715) at 5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

CD8, also known as Ly-2, is a heterodimeric glycoprotein consisting of an  $\alpha$  and  $\beta$  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  $\alpha$ /Ly-2 or  $\alpha$ /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 $\alpha$ , without CD8 $\beta$ , has been detected on subsets of  $\gamma\delta$  TCR-bearing T cells (4), intestinal intrathymic lymphocytes (5, 6) and dendritic cells (7, 8).

**References:**

1. Bierer, B.E. *et al.* (1989) *Annu. Rev. Immunol.* **7**:579.
2. Ledbetter, J.A. *et al.* (1980) *J. Exp. Med.* **152**:280.
3. Hayakawa, K. *et al.* (1994) *Science* **263**:1131.
4. MacDonald, H.R. *et al.* (1990) *Eur. J. Immunol.* **20**:927.
5. Rocha, B. *et al.* (1992) *Immunol. Today* **13**:449.
6. Wang, J. and J.R. Klein (1994) *Science* **265**:1860.
7. Vermech, D. *et al.* (1992) *J. Exp. Med.* **176**:47.
8. Suss, G. and K. Shortman (1996) *J. Exp. Med.* **183**:1789.