

## DESCRIPTION

<b>Species Reactivity</b>	Canine
<b>Specificity</b>	Detects canine CD8 $\alpha$ in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant CD8 from human, mouse, cotton rat, cat, or guinea pig is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 569126
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant canine CD8 $\alpha$ Ser22-Glu186 Accession # P33706
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ 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 $\mu$ m filtered solution in PBS.

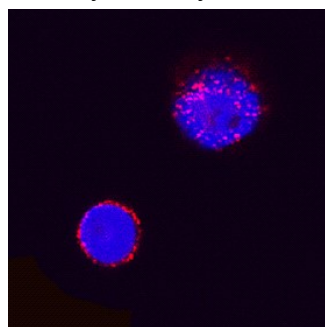
## APPLICATIONS

**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>Immunocytochemistry</b>	8-25 $\mu$ g/mL	See Below

## DATA

### Immunocytochemistry



**CD8 $\alpha$  in Canine PBMCs.** CD8 $\alpha$  was detected in immersion fixed canine peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Canine CD8 $\alpha$  alpha Monoclonal Antibody (Catalog # MAB6709) at 25  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell membrane. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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 is a dimeric complex made up of two Ig superfamily members. The CD8 $\alpha$  chain is a 34 kDa type I transmembrane glycoprotein that is disulfide-linked either to itself forming CD8 $\alpha\alpha$ , or to an unrelated 30-35 kDa CD8 $\beta$  chain, forming CD8 $\alpha\beta$ . CD8 $\alpha$  contains one V-type Ig-like domain in its extracellular region (ECD) that binds to class I MHC molecules. CD8 $\alpha\beta$  is a TCR coreceptor, while CD8 $\alpha\alpha$  promotes T cell survival and differentiation. Within the ECD, canine CD8 $\alpha$  shares 63%, 45%, 43%, 68%, and 54% amino acid identity with human, mouse, rat, feline, and porcine CD8 $\alpha$ , respectively.