

## DESCRIPTION

<b>Species Reactivity</b>	Canine
<b>Specificity</b>	Detects canine IL-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant human IL-2, recombinant mouse IL-2, recombinant rat IL-2, recombinant feline IL-2, recombinant bovine IL-2, recombinant equine IL-2, recombinant cotton rat IL-2, and recombinant porcine IL-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant canine IL-2 Ala21-Thr155 (Cys147Ser) Accession # Q29416
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

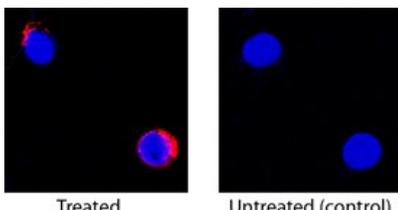
## APPLICATIONS

**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>Western Blot</b>	0.1 µg/mL	Recombinant Canine IL-2 (Cys147Ser) (Catalog # 1815-CL)
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Canine IL-2 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Canine IL-2 Antibody (Catalog # AF1815)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Canine IL-2 Biotinylated Antibody (Catalog # BAF1815)
<b>Standard</b>		Recombinant Canine IL-2 (Cys147Ser) (Catalog # 1815-CL)

## DATA

**Immunocytochemistry**



**IL-2 in Canine PBMCs.** IL-2 was detected in immersion fixed canine peripheral blood mononuclear cells (PBMCs) untreated or treated with calcium ionomycin and PMA using Goat Anti-Canine IL-2 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF1815) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to cell secretion. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it 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

Interleukin 2 was initially identified as a T cell growth factor that is produced by T cells following activation by mitogens or antigens. Since then, it has been shown that IL-2 can also stimulate the growth and differentiation of B cells, natural killer (NK) cells, lymphocyte activated killer (LAK) cells, monocytes/macrophages, and oligodendrocytes. The biological activity of IL-2 is mediated by the binding to cell surface receptor complexes composed of three subunits designated as α, β, and γ subunits. IL-2 binds the α subunit with low affinity. The functional high affinity IL-2 receptor is a heterotrimeric complex of the α, β, and γ subunits. IL-2 binds with intermediate affinity to the complex containing the β and γ subunits, which is also capable of transducing IL-2 signals. In T cells, the β and γ subunits are shared with the IL-15 receptor complex. The γ subunit of the IL-2 receptor complex has also been shown to be a subunit of the receptor complexes of IL-4, IL-7, and IL-9. At the amino acid sequence level, canine IL-2 shares 90%, 86%, 85%, 76%, and 75% sequence similarities to feline, human, equine, mouse, and bovine IL-2, respectively.