

**DESCRIPTION**

<b>Species Reactivity</b>	Porcine
<b>Specificity</b>	Detects porcine IL-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with human, mouse, rat, bovine, canine, equine, feline, or cotton rat IL-2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 100312
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant porcine IL-2 Ala21-Thr154 Accession # P26891
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

**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>Intracellular Staining by Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Porcine peripheral blood mononuclear cells treated with LPS, fixed with paraformaldehyde, and permeabilized with saponin

**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</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 in addition to its T cell growth factor activity, 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. Mature porcine and human IL-2 share approximately 72% amino acid sequence identity. The biological activity of IL-2 is mediated by the binding of IL-2 to cell surface receptor complexes. The functional high-affinity receptor of IL-2 is composed of three distinct polypeptide chains, the IL-2 receptor  $\alpha$ ,  $\beta$  and  $\gamma$  subunits. The intermediate-affinity IL-2 receptor complex, which lacks the  $\alpha$  subunit, but contains both the  $\beta$  and  $\gamma$  subunits, is also capable of transducing the IL-2 signal. In T cells, the  $\beta$  and  $\gamma$  subunits are shared with the IL-15 receptor complex. The  $\gamma$  chain of the IL-2 receptor complex is also a subunit of IL-4, IL-7, and IL-9 receptor complexes.

**References:**

1. Taniguchi, T. and Y. Minami (1993) *Cell* **73**:5.
2. Waldmann, T. *et al.* (1998) *Int. Rev. Immunol.* **16**:205.
3. Nelson, B.H. and D.M. Willeford (1998) *Adv. Immunol.* **70**:1.

**PRODUCT SPECIFIC NOTICES**

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