

DESCRIPTION

Species Reactivity	Porcine
Specificity	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.
Source	Monoclonal Mouse IgG _{2B} Clone # 100312
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant porcine IL-2 Ala21-Thr154 Accession # P26891
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	Porcine peripheral blood mononuclear cells treated with LPS, fixed with paraformaldehyde, and permeabilized with saponin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

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 α , β and γ subunits. The intermediate-affinity IL-2 receptor complex, which lacks the α subunit, but contains both the β and γ subunits, is also capable of transducing the IL-2 signal. In T cells, the β and γ subunits are shared with the IL-15 receptor complex. The γ 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.

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