

DESCRIPTION

Species Reactivity	Porcine
Specificity	Detects porcine IL-2 in Western blots. In Western blots, approximately 50% cross-reactivity with recombinant human IL-2 is observed and less than 2% cross-reactivity with recombinant mouse IL-2 and recombinant rat IL-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant porcine IL-2 Ala21-Thr154 Accession # P26891
Formulation	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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Porcine IL-2 (Catalog # 652-P2)
Immunocytochemistry	10-25 µg/mL	See Below

DATA

Immunocytochemistry

IL-2 in Porcine PBMCs. IL-2 was detected in immersion fixed porcine peripheral blood mononuclear cells (PBMCs) treated with calcium ionomycin and PMA using Goat Anti-Porcine IL-2 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF652) 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 cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.