

**DESCRIPTION**

**Source** *E. coli*-derived  
Ala21-Thr154, with an N-terminal Met  
Accession # P26891

**N-terminal Sequence Analysis** Met

**Predicted Molecular Mass** 15.3 kDa

**SPECIFICATIONS**

**Activity** Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. Gearing, A.J.H. and C.B. Bird (1987) in *Lymphokines and Interferons, A Practical Approach*. Clemens, M.J. *et al.* (eds): IRL Press. 295.  
The ED<sub>50</sub> for this effect is 0.2-0.6 ng/mL.

**Endotoxin Level** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

**Formulation** Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 50 µg/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.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 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. At the amino acid sequence level, there is approximately 72% similarity between mature porcine and human IL-2.

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 has also been shown to be a subunit of the receptor complexes of IL-4, IL-7, and IL-9.

**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.