Technical Data Sheet

Recombinant Porcine Interleukin-2 (rPoIL-2)

Porcine Interleukin-2

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells, γδ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2Rα, 75 kDa IL2Rβ, 64 kDa common gamma chain γc/IL2Rγ) that are present on the cell surface in varying preformed complexes. Recombinant porcine IL-2 is a 15.3 kDa protein containing 134 amino acid residues and it shares about 72 % amino acid sequence identity with mouse, human and rat IL-2. It also shares 60 % and 67 % acid sequence identity with rhesus macaque and equus caballus IL-2, respectively.

Catalog Number:	RC282-13
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 15.2 kDa, a single non-glycosylated polypeptide chain containing 134 amino acids.
Quantity:	2μg/10μg/1000μg
AA Sequence:	APTSSSTKNT KKQLEPLLLD LQLLLKEVKN YENADLSRML TFKFYMPKQA TELKHLQCLV EELKALEGVL NLGQSKNSDS ANIKESMNNI NVTVLELKGS ETSFKCEYDD ETVTAVEFLN KWITFCQSIY STLT
Purity:	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0×10^6 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered concentrated solution in 1 × PBS, pH 7.4.
Endotoxin:	Less than 1 EU/μg of rPoIL-2 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is

	stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. **Avoid repeated freeze/thaw cycles**.
Usage:	This material is offered by Bio Basic Canada Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.