

Recombinant Porcine Interleukin-2 (rPoIL-2)

PrimeGene Technical Data Sheet

Catalog Number: 171-02

Source: Escherichia coli.

Molecular Weight: Approximately 15.2 kDa, a single non-glycosylated polypeptide chain containing 134 amino acids.

Quantity: $2\mu g/10\mu g/1000\mu g$

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 ED₅₀ 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 $> 2.0 \times$

 10^6 IU/mg.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μ m 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 \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.

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.

Usage: This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further

evaluation purposes. NOT FOR HUMAN USE.

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, $\gamma\delta$ 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 IL2R α , 75 kDa IL2R β , 64 kDa common gamma chain γ c/IL2R γ) 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.

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