

**PrimeGene Technical Data Sheet**

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<b>Catalog Number:</b>	1F1-02A
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 14.9 kDa, a single non-glycosylated polypeptide chain containing 129 amino acids.
<b>Quantity:</b>	2µg/10µg/1000µg
<b>AA Sequence:</b>	APTSSSKRET QQQLKQLQMD LKLLLEGVNN NKNPKLSKML TFKINMPKKA TELKHLQCLE EELKPLEEML KNFLSKDIKE LMSNINVTVL GLKGSETRFT CEYDDETGTI VEFLNKWITF SQSIFSTMT
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using murine CTLL-2 cells is less than 1.0 µg/ml, corresponding to a specific activity of > 1000 IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 6.5.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rEqIL-2 Cys141Ser as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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***Equine 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 equine IL-2 is a 14.9 kDa protein containing 129 amino acid residues. At the amino acid sequence level, equine IL-2 shares 72 %, 70 %, 56 % and 54 % sequence similarities with human, porcine, rat and murine IL-2, respectively. It has been reported that equine IL-2 augmented proliferation in equine peripheral blood mononuclear cells, but has no effect on murine CTLL2 cells.