

# Recombinant Protein Technical Manual Recombinant Rat Interleukin-2/IL-2 Protein (His Tag)

**RPES4317** 

### **Product Data:**

**Product SKU:** RPES4317 **Size:** 10μg

Species: Rat Expression host: Human Cells

Uniprot: P17108

## **Protein Information:**

Molecular Mass: 16.3 kDa

AP Molecular Mass: 146 kDa

Tag: C-His

**Bio-activity:** 

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue

ice. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 μm filtered solution of 5mM NaH2PO4, 5mM Citric acid, 150mM

NaCl, pH4.0.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** Interleukin-2; IL-2; T-cell growth factor; TCGF; Aldesleukin; IL2

# Immunogen Information:

Sequence: Ala21-Gln155

# Background:

Interleukin-2(IL-2)is a O-glycosylated four  $\alpha$ -helix bundle cytokine that has potent stimulatory activity for antigenactivated T cells. It is expressed by CD4+ and CD8+ T cells,  $\gamma\delta$  T cells, B cells, dendritic cells, and eosinophils. Mature rat IL-2 shares 66% and 73% amino acid sequence identity with human and mouse IL-2,respectively. The receptor for IL-2 consists of three subunits that are present on the cell surface in varying preformed complexes. IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions that are essential for the immune response. IL-2 stimulates growth and differentiation of B-cells, NK cells, lymphokine-activated killer cells, monocytes, macrophages and oligodendrocytes.