



# Recombinant Protein Technical Manual

## Recombinant Human Interleukin-2/IL-2 Protein (Mutant)(Active) RPES1629

### Product Data:

**Product SKU:** RPES1629

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P60568

### Protein Information:

**Molecular Mass:** 16.5 kDa

**AP Molecular Mass:** 16&18 kDa

**Tag:**

**Bio-activity:** Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. The specific activity of Recombinant Human IL-2 is  $\geq 1 \times 10^7$  IU/mg.

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

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

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

**Application:** Cell Culture

**Synonyms:** Interleukin-2; IL-2; T-Cell Growth Factor; TCGF; Aldesleukin; IL3

## Immunogen Information:

**Sequence:** Ala21-Thr153(L100F,R101D,L105V,I106V,I112F)

## Background:

Interleukin-2(IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system, belongs to the IL-2 family. It 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. New research has shown that IL-2 mutant reduced toxicity while being more potent at stimulating anti-tumor effector immune cells.