Recombinant Rat IL-2 Protein(Sumo Tag)

Catalog Number: PDER100249

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

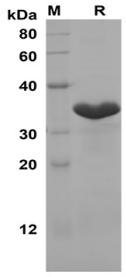
Description

Species	Rat
Source	E.coli-derived Rat IL-2 protein Ala21-Gln155, with an N-teminal Sumo
Calculated MW	27.7 kDa
Observed MW	35 kDa
Accession	P17108
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Rat IL-2 proteins, 2μg/lane of Recombinant Rat IL-2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 35 kDa

Background

Interleukin-2(IL-2)is a O-glycosylated four α-helix bundle cytokine that has potent stimulatory activity for antigenactivated T cells. It is expressed by CD4+ and CD8+ T cells, γδ 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.