

Recombinant Rat IL-2 Protein(hIgG1 Fc Tag)

Catalog Number: PDMR100106

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

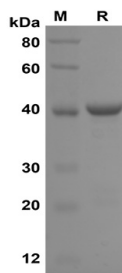
Description

| | |
|---------------|------------------------------------------------------------------------------|
| Species | Rat |
| Source | Mammalian-derived Rat IL-2 protein Ala21-Gln155, with an C-terminal hIgG1 Fc |
| Calculated MW | 39.7 kDa |
| Observed MW | 40 kDa |
| Accession | P17108 |
| Bio-activity | Not validated for activity |

Properties

| | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity | > 95% as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 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 °C. Reconstituted protein solution can be stored at 4-8°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 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, 2 µg/lane of Recombinant Rat IL-2 proteins, was resolved with SDS-PAGE under reducing conditions, showing bands at 40 KD

Background

For Research Use Only

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, $\gamma\delta$ 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.