

## Recombinant Mouse Interleukin-2/IL-2 Protein

Catalog Number: PKSM041320

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

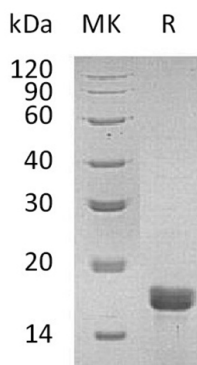
### Description

<b>Species</b>	Mouse
<b>Source</b>	E.coli-derived Mouse Interleukin-2/IL-2 protein Ala21-Gln169
<b>Calculated MW</b>	17.4 kDa
<b>Observed MW</b>	17 kDa
<b>Accession</b>	P04351
<b>Bio-activity</b>	Measured in a cell proliferation assay using CTLL- 2 mouse cytotoxic T cells. The specific activity of Recombinant Mouse IL-2 is $\geq 1 \times 10^7$ IU/mg.

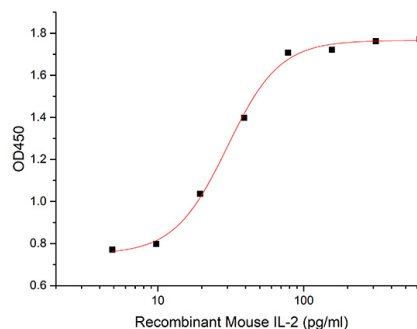
### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM Sodium Citrate, 0.2% Tween 80, pH 3.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

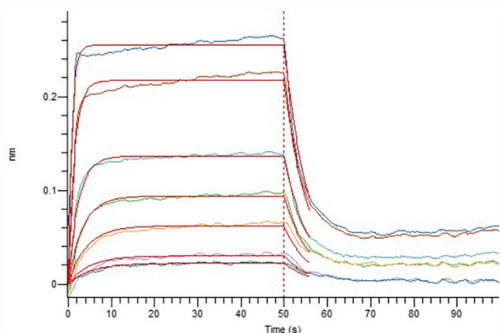
### Data



> 95 % as determined by reducing SDS-PAGE.



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



Loaded Human IL-2RA-Fc(PKSH032570) on Protein A Biosensor, can bind Mouse IL-2(PKSM041320) with an affinity constant of 0.17  $\mu$ M as determined in BLI assay.

## Background

Interleukin 2 (IL-2), also termed T-cell growth factor, is a member of the cytokine family which includes IL-4, IL-7, IL-9, IL-15 and IL-21. Each member of this family has a four alpha helix bundle. IL-2 signals through the IL-2 receptor, a complex consisting of three subunits, termed alpha, beta and gamma. The IL-2 R gamma is shared by cytokine receptors of all members of cytokine family. Mature mouse IL-2 shares 56% and 73% aa sequence identity with human and rat IL-2, respectively. IL-2 is produced by CD4<sup>+</sup> T cell, CD8<sup>+</sup> T cells, gamma  $\delta$  T cells, B cells, dendritic cells and eosinophils, and plays a vital role in key function of the immune system, tolerance and immunity, primarily via its potent stimulatory activity for T cells. Thus, IL-2 may be a key cytokine in the natural suppression of autoimmunity.