

Recombinant Mouse IL-2

Catalog No.: RP0013

Basic Information

Information

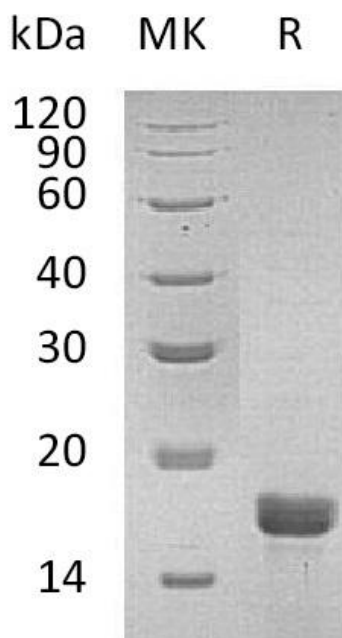
Source	<i>E.coli</i>
Description	Recombinant Mouse Interleukin-2 is produced by our E.coli expression system and the target gene encoding Ala21-Gln169 is expressed.
Accession	P04351
Known As	aldesleukin; interleukin 2; interleukin-2; IL-2; IL2; T-cell growth factor; T cell growth factor; TCGF
Predicted Mol Mass	17.4 KDa
Apparent Mol Mass	17 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Sodium Citrate, 0.2% Tween 80, pH 3.0.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/µg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

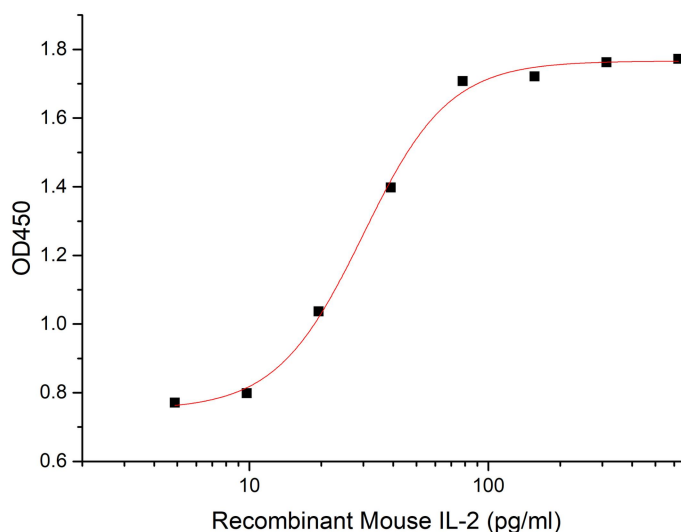
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



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. (QC verified).

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⁺ T cell, CD8⁺ T cells, gamma δ 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.