

Animal-Free IL-2 Protein, Mouse (His)

Cat. No.:	HY-P70646AF
Synonyms:	rMuIL-2; IL2; T-cell Growth Factor; TCGF; Aldesleukin
Species:	Mouse
Source:	E. coli
Accession:	P04351 (A21-Q169)
Gene ID:	16183
Molecular Weight:	Approximately 18.2 kDa

PROPERTIES

AA Sequence	<pre> M A P T S S S T S S S T A E A Q Q Q Q Q Q Q Q Q Q Q Q H L E Q L L M D L Q E L L S R M E N Y R N L K L P R M L T F K F Y L P K Q A T E L K D L Q C L E D E L G P L R H V L D L T Q S K S F Q L E D A E N F I S N I R V T V V K L K G S D N T F E C Q F D D E S A T V V D F L R R W I A F C Q S I I S T S P Q </pre>
Biological Activity	Measure by its ability to induce CTLL-2 cells proliferation. The ED ₅₀ for this effect is <0.3 ng/mL. The specific activity of recombinant mouse IL-2 is approximately >3 x 10 ⁶ IU/mg
Appearance	Lyophilized powder.
Formulation	Lyophilized from a solution containing 1X PBS, pH 7.4.
Endotoxin Level	<0.1 EU per 1 µg of the protein by the LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	IL-2 is a receptor cytokine produced by activated CD4-positive helper T cells and plays its role by activating JAK/STAT, inosine phosphate 3-kinase /PI3K and mitogen-activated protein kinase /MAPK. IL-2 binds to receptor complexes consisting of high affinity trimers IL-2R (IL2RA/CD25, IL2RB/CD122 and IL2RG/CD132) or low affinity dimers IL-2R (IL2RB and IL2RG). IL-2 can increase the cytolytic activity of NK cells. Promote strong proliferation of activated B cells and immunoglobulin production. IL-2 is involved in differentiation and homeostasis of effector T cell subsets, including Th1, Th2, Th17, and memory CD8-positive T cells. IL-2 synthesis is strictly regulated by TCR and CD28 signaling at the mRNA level. It mediates the
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activation induced cell death (AICD) process. IL-2 can be used in the research of cancer immunotherapy^{[1][2][3][4][5][6]}.

Caution: Product has not been fully validated for medical applications. For research use only.

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