Active Recombinant Human IL2 Protein (Ala21-Thr153), GMP Grade, Animal-Free

Cat. No. IL2-02HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GMP Recombinant Human IL2 Protein, Ala21-Thr153 (Cys145Ser), with and without an N-terminal Met was expressed in E. coli and produced using non-animal reagents in an animal-free laboratory under cGMP guidelines.
Species	Human
Source	E.coli
ProteinLength	Ala21-Thr153
Description	This gene is a member of the interleukin 2 (IL2) cytokine subfamily which includes IL4, IL7, IL9, IL15, IL21, erythropoietin, and thrombopoietin. The protein encoded by this gene is a secreted cytokine produced by activated CD4+ and CD8+ T lymphocytes, that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine (IL2R) is a heterotrimeric protein complex whose gamma chain is also shared by IL4 and IL7. The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.
Bio-activity	Measured in a cell proliferation assay using CTLL-2 mouse cytotoxic T cells. The ED50 for this effect is 0.0300-0.250 ng/mL.

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	The specific activity of recombinant human IL-2 is >5.00 × 10^6 IU/mg, which is calibrated against the human IL-2 WHO International Standard.
Molecular Mass	Predicted Molecular Mass: 15.5 kDa SDS-PAGE: 13 kDa, under reducing conditions.
N-terminal Sequence Analysis	Ala21 & Met
Endotoxin	< 0.01 EU/μg of the protein by the LAL method.
Purity	> 97%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution in Sodium Acetate with Trehalose.
Reconstitution	Reconstitute at 500 μg/mL in sterile deionized water.
Shipping	The product is shipped at ambient temperature.

GENE INFORMATION

Gene Name	IL2 interleukin 2 [Homo sapiens]
Official Symbol	IL2

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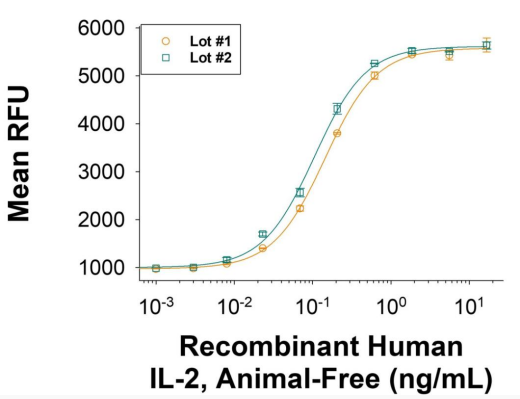
Synonyms	IL2; interleukin 2; interleukin-2; IL 2; T cell growth factor; TCGF; aldesleukin; involved in regulation of T-cell clonal expansion; IL-2; lymphokine
Gene ID	3558
mRNA Refseq	NM_000586
Protein Refseq	NP_000577
MIM	147680
UniProt ID	P60568
Bioactivity	

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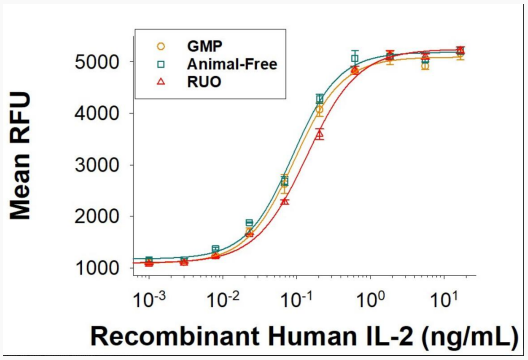
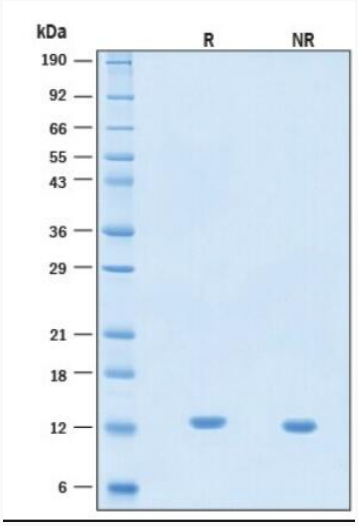
Bioactivity	
SDS-PAGE	

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