

Active Recombinant Mouse IL7 Protein

Cat. No. IL7-475M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Interleukin-7 Mouse Recombinant produced in E. coli is a single, non-glycosylated polypeptide chain containing 129 amino acids and having a molecular mass of 14.9 kDa.
Species	Mouse
Source	E.coli
Description	The protein encoded by this gene is a hematopoietic growth factor important for B and T cell development. Alternative splicing results in several transcript variants encoding different isoforms.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.
Molecular Weight	14.9 kDa
AA Sequence	ECHIKDKEGKAYESVLMISIDELDKMTGTDSNCPNNEPNFFRKHVCDDTKEAAFLNR AARKLKQFLKMNISEEFNVHLLTVSQGTQTLVNCTSKEEKNVKEQKKNDACFLKRLL REIKTCWNKILKGS
Bio-Activity	The ED50 was determined by the dose-dependent stimulation of the proliferation of murine 2E8 cells is less than 0.2 ng/mL, corresponding to a specific activity of $>5.0 \times 10^6$ IU/mg.
Purity	Greater than 96.0% as determined by: (a) Analysis by RP-HPLC; (b) Analysis by

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

SDS-PAGE.

Notes

Our products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Solubility

It is recommended to reconstitute the lyophilized Interleukin 7 in sterile 18 MΩ-cm H₂O not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Interleukin-7 although stable at room temperature for 3 weeks, should be stored desiccated below -18 centigrade. Upon reconstitution IL7 should be stored at 4 centigrade between 2-7 days and for future use below -18 centigrade. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Storage Buffer

Filtered (0.2µm) and lyophilized from a concentrated (1 mg/mL) solution in 1×PBS, pH7.4 and 2% trehalose.

Reference

1. Disruption of B⁶ Leads to the Deterioration of the Vascular Niche for Hematopoietic Stem Cells. Publication: Stem Cells 28.2 (2010): 268-278.

GENE INFORMATION

Gene Name

IL7 interleukin 7 [*Mus musculus*]

Official Symbol

IL7

Synonyms

IL7; interleukin 7; interleukin-7; IL-7; hlb368; A630026I06Rik; MGC129342

Gene ID

16196

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mRNA Refseq	NM_008371
Protein Refseq	NP_032397
UniProt ID	P10168

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