

# Product datasheet for TP728272M

## OriGene Technologies, Inc.

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## Recombinant IL-7 (Interleukin-7), Human

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant IL-7 (Interleukin-7), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MDCDIEGKDGKQYESVLMVSIDQLLDSMKEIGSNCLNNEFNFFKRHICDANKEGMFLFRAARKLRQFLK MNSTGDFDLHLLKVSEGTTILLNCTGQVKGRKPAALGEAQPTKSLEENKSLKEQKKLNDLCFLKRLLQEIK

TCWNKILMGTKEH with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 18.3 kDa. The protein migrates as 19 kDa under reducing

condition (SDS-PAGE analysis).

**Purity:** >95% as determined by SDS-PAGE.

**Buffer:** The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 8.0.

**Bioactivity:** Measured in a cell proliferation assay using PHA-activated human peripheral blood

lymphocytes (PBMC). The ED<sub>50</sub> for this effect is <0.8 ng/mL. The specific activity of

recombinant human IL-7 is > 1 x 108 IU/mg.

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu$ g/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P13232

**Synonyms:** Lymphopoietin 1(LP-1), pre-B-cell factor

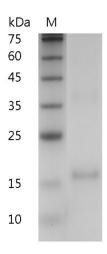




## **Summary:**

Interleukin-7 (IL-7) is a multipotent cytokine belonged to one of the members of IL-2 superfamily. IL-7 has diverse effects on the hematopoietic and immune regulations. IL-7 is a trophic factor that is necessary for both B cell and T cell proliferation and development. In addition, it presents potential antitumor effects in tumors such as glioma, melanoma, lymphoma, leukemia, prostate cancer, and glioblastoma.

# **Product images:**



SDS- PAGE analysis of recombinant human IL-7