

# Product datasheet for TP728345M

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### Recombinant IL-21 (Interleukin-21), Mouse

**Product data:** 

**Product Type: Recombinant Proteins** 

**Description:** Recombinant IL-21 (Interleukin-21), Mouse

Species: Mouse **Expression Host:** E. coli

**Expression cDNA Clone** 

MHKSSPQGPDRLLIRLRHLIDIVEQLKIYENDLDPELLSAPQDVKGHCEHAAFACFQKAKLKPSNPGNNKT or AA Sequence:

FIIDLVAQLRRRLPARRGGKKQKHIAKCPSCDSYEKRTPKEFLERLKWLLQKMIHQHLS with

polyhistidine tag at the C-terminus.

His Tag (C-term) Tag:

Predicted MW: The protein has a calculated MW of 15.9 kDa. The protein migrates as 16 kDa under reducing

condition (SDS-PAGE analysis).

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

The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4. **Buffer:** 

**Bioactivity:** Measure by its ability to enhance IFN gamma secretion in NK-92 cells. The ED₅₀ for this effect

is <6 ng/mL. The specific activity of recombinant mouse IL-21 is > 1.6 x 10<sup>5</sup> IU/mg.

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

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

> lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 μg/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

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

> 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:** Q9ES17

7a11 Synonyms:

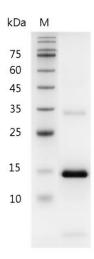




### **Summary:**

Interleukin-21 (IL-21) belongs to the IL-15/IL-21 family, which exerts pleiotropic immune regulations. IL-21 produced primarily by natural killer T (NKT) cells, T follicular helper (TFH) cells and TH17 cells. As a pleiotropic cytokine, IL-21 has been shown to regulate both innate and humoral immunity. It has potent inhibitory activity towards the activation and maturation of granulocyte-macrophage colony-stimulating factor (GM-CSF)-induced dendritic cells (DCs). In B cells, IL-21 has a major role in the development of immunoglobulin responses. In T cells, it is required to facilitate the functional differentiation of several CD4+ T cell subsets. In addition, the ability of IL-21 to enhance the cytotoxic activity of both CD8+ T cells and NK cells makes it as a potential antitumor agent.

## **Product images:**



SDS- PAGE analysis of recombinant mouse IL-21