

# **Product datasheet for TP728249S**

#### OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Recombinant Proteins

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

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MQDRHMIRMRQLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSAFSCFQKAQLKSANTGNNERIINVSI

KKLKRKPPSTNAGRRQKHRLTCPSCDSYEKKPPKEFLERFKSLLQKMIHQHLSSRTHGSEDS with

polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 16.2 kDa. The protein migrates as 20 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:** Measure by its ability to enhance IFN gamma secretion in NK-92 cells. The ED₅₀ for this effect

is <10 ng/mL.

**Endotoxin:**  $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$ 

**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: Q9HBE4

Synonyms: Za11

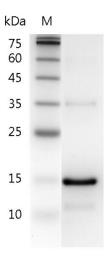




#### **Summary:**

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 human IL-21