

Product datasheet for TP728249L

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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

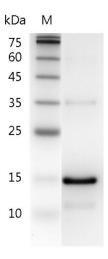




Summary:

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