

Recombinant Human IL-21 Protein (GMP Grade)

Please read the manual carefully before use.

Cat. No. PM111

Version No. Version 1.0

Storage: at -20°C for two years.

Description

Interleukin-21 (IL-21) is a type I cytokine that shares a high degree of homology with IL-2, IL-4, and IL-15, and it shares the γ c receptor subunit with IL-7 and IL-9^[1-2]. IL-21 is secreted by activated CD4⁺ T cells, has a molecular structure similar to that of IL-15, and is involved in regulating B cell proliferation. It synergizes with IL-15 to promote the proliferation of bone marrow precursor cells, as well as the proliferation, differentiation, and cytotoxic activity of natural killer (NK) cells^[3-5].

Product Information

Expressed system: CHO

Molecular weight: 15.9 kDa

Purity: > 95% by SEC-HPLC, SDS-PAGE analysis.

Endotoxin: < 10 EU/mg

Biological activity: Measured interferon gamma (IFN- γ) secretion using human natural killer cell line NK-92, ED₅₀ less than 8 ng/ml.

Form: lyophilized, sterile

Kit Content

| Component | PM111-01 | PM111-02 | PM111-03 |
|---|------------|------------|----------|
| Recombinant Human IL-21 Protein (GMP Grade) | 10 μ g | 50 μ g | 1 mg |

Usage guide

Reconstitution: We recommend the vial be briefly centrifuged prior to opening. Reconstitute with sterile, distilled water on ice at a concentration no less than 100 μ g/ml.

Storage: Lyophilized preparation at -20°C, preferably desiccated. Upon reconstitution, the protein may be stored at 2°C to 8°C for up to one week. For long term storage of the reconstituted protein, apportion into working aliquots and store at -80°C for up to 12 months. Avoid repeated freeze/thaw cycles.

References

- [1] Ma SW, Huang X, Li YY, et al. High serum IL-21 levels after 12 weeks of antiviral therapy predict HBeAg seroconversion in chronic hepatitis B. *J Hepatol.* 2012 Apr;56(4):775-81.
- [2] Li J, Ren W, Ma W, Zhang J, Shi J, Qin C. Interleukin-21 responses in patients with chronic hepatitis B. *J Interferon Cytokine Res.* 2015 Feb;35(2):134-42.
- [3] Shi Y, Chen Z, Zhao Z, Yu Y, Fan H, Xu X, Bu X, Gu J. IL-21 Induces an Imbalance of Th17/Treg Cells in Moderate-to-Severe Plaque Psoriasis Patients. *Front Immunol.* 2019 Aug 7;10:1865.
- [4] Nalbant A. IL-17, IL-21, and IL-22 Cytokines of T Helper 17 Cells in Cancer. *J Interferon Cytokine Res.* 2019 Jan;39(1):56-60.
- [5] Sun S, Chen H, Zheng X, Ma C, Yue R. Analysis on the level of IL-6, IL-21, AMH in patients with auto-immunity premature ovarian failure and study of correlation. *Exp Ther Med.* 2018 Oct;16(4):3395-3398.

For research use only, not for clinical diagnosis.

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