

Rev05 DATASHEET

Update: Jun,21,2023

## IL-21, Human

Cat. No.: Z03076

## **Product Introduction**

Species	Human
Protein Construction	Expressed with an N-terminal Met.
	IL-21 (Gln30-Ser162) Accession # Q9HBE4
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	$<$ 0.2 EU/ $\mu$ g of protein by gel clotting method
Biological Activity	${\rm ED_{50}} \leqslant$ 3.0 ng/ml, measured by its ability to enhance IFN-gamma secretion in NK-92 human natural killer lymphoma cells.
Expression System	E. coli
Apparent Molecular Weight	~15.4 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## **Background**

Target Background: Interleukin-21 (IL-21) belongs to the Type I four helix bundle cytokines, and shares the common cytokine receptor γ chain with IL-2, IL-4, IL-7, IL-9, and IL-15. IL-21 is expressed by CD4<sup>+</sup> T cells, natural killer (NK) T cells, and Th17 cells, and the IL-21 receptor is highly expressed on CD4<sup>+</sup> and CD8<sup>+</sup> B cells; indeed, IL-21 plays a pivotal role in the survival and proliferation of B cells, and their differentiation to immunoglobulin (Ig) producing cells. IL-21 up-regulates and down-regulates the production of IgG1 and IgE by B cells, respectively, and diminishes the severity of allergy and asthma. In some case, IL-21 also induces the apoptosis of B cells. The other roles of IL-21 include regulation of innate immune systems, implication on autoimmunity, and antitumor actions.

Synonyms: IL21; CVID11; IL-21; Za11; interleukin 21



For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

生产商: 南京金斯瑞生物科技有限公司 江苏省南京市江宁区科学园雍熙路28号

Manufacturer: Nanjing GenScript Biotech Co., Ltd. No. 28Yongxi Road, Jiangning District, Nanjing, Jiangsu, China