

Rev03
Update: Dec,14,2021

DATASHEET

IL-21, Mouse

Cat. No.: Z03242

Product Introduction

Species	Mouse
Protein Construction	Expressed with an N-terminal Met. IL-21 (Pro25-Ser146) Accession # Q9ES17-1
Purity	> 98% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 1.0 ng/ml, measured by its ability to stimulate the proliferation of human ANBL-6 cells, corresponding to a specific activity of > 1.0 × 10 ⁶ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~15.1 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 ₂ O or PBS 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⁺ T cells, natural killer (NK) T cells, and Th17 cells. The IL-21 receptor is highly expressed on CD4⁺ and CD8⁺ B cells. IL-21 plays a pivotal role in the survival and proliferation of B cells, and their differentiation to immunoglobulin (Ig) producing cells. IL-21 regulates the production of IgG1 and IgE by B cells, and diminishes the severity of allergy and asthma. In some cases, IL-21 induces B cell apoptosis. Other roles of IL-21 include regulation of the innate immune system, implication in autoimmunity, and antitumor activity.

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.