

## 32-12202: Human Interleukin-21 (AF)

**Gene :** IL21  
**Gene ID :** 59067  
**Uniprot ID :** Q9HBE4  
**Alternative Name :** Za11, Interleukin-21

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Monomer, 15.4 kDa (132 aa)

Interleukin 21 (IL-21) is a member of the common-gamma chain family of cytokines that are involved in immunoregulation. IL-21 is normally expressed by activated CD4+ T cells and is aberrantly expressed in Hodgkin lymphoma cells. The IL-21 receptor (IL-21R) activates the JAK/STAT signaling pathway and is expressed on T, B, and natural killer (NK) cells. Within the B cell lineage, IL-21 is a switch factor regulating IgG1 and IgG3 antibody production. IL-21 also cooperates with IL-4 for the production of multiple antibody classes in B cells. IL-21 has pleiotropic effects on the proliferation, differentiation, and effector functions of B, T, NK, and dendritic cells.

### Product Info

**Amount :** 10 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at  $\geq 95\%$   
**Content :** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5  
Sterile water at 0.1 mg/mL  
**Storage condition :** Store at  $-20^{\circ}\text{C}$   
**Amino Acid :** MQDRHMIRMRLQLIDIVDQLK NYVNDLVPEFLPAPEDVETN CEWSAFSCFQ KAQLKSANTG NNERIINVSI  
KKLKRKPPST NAGRRQKHRL TCPSCDSYEK KPPKEFLERF KSLQKMIHQ HLLSRTHGSE DS

### Application Note

**Endotoxin:** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by ANBL-6 cell proliferation OR B9 cell proliferation at  $\text{ED}_{50} \leq 2 \text{ ng/mL}$ ;  $\geq 5.0 \times 10^5$  units/mg (typical  $\text{ED}_{50}$  is  $< 1 \text{ ng/mL}$ ) OR  $\text{ED}_{50} \leq 50 \text{ ng/mL}$ ;  $\geq 2.0 \times 10^4$  units/mg. Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at  $-80^{\circ}\text{C}$  and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.

