## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 30-162 aa

**UniProt No.** Q9HBE4

NCBI Accession No. NP\_068575

Alternative Names Interleukin-21 isoform 1, CVID11, IL-21, Za11

# **PRODUCT SPECIFICATION**

**Molecular Weight** 15.5 kDa (134aa) confirmed by MALDI-TOF

Concentration 0.25mg/ml (determined by absorbance at 280nm)

**Formulation** Liquid in. Phosphate-Buffered Saline (pH 7.4)

**Purity** > 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

### **Biological Activity**

The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 range  $\leq$ 4ng/ml.

Tag Non-Tagged

Application SDS-PAGE, Bioactivity

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND



#### Description

IL-21, also known as Interleukin-21, is a T-helper cytokine that regulates humoral immunity and cell-mediated anti-tumor responses. It has broad immunoregulatory activity and can modulate both humoral and cell-mediated responses. It is important in the regulation of haematopoiesis and immune responses, and can influence lymphocyte development. It is produced by activated T cell, and it influences proliferation of T and B cells and cytolytic activity of natural killer cells. It may be a critical factor in the control of persistent viral infections. It has a potential predicating significance for survival Time in patients in the development of sporadic CRC. It binds to the IL-21R and can activate janus kinase JAK1, JAK3, STAT1, and STAT3 in EDgamma-16 cells. Recombinant human IL-21, was expressed in E. coli and purified by using conventional chromatography techniques.

#### **Amino acid Sequence**

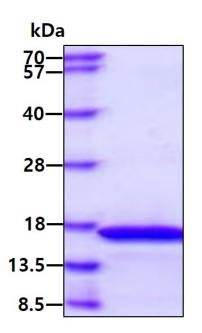
MQGQDRHMIR MRQLIDIVDQ LKNYVNDLVP EFLPAPEDVE TNCEWSAFSC FQKAQLKSAN TGNNERIINV SIKKLKRKPP STNAGRRQKH RLTCPSCDSY EKKPPKEFLE RFKSLLQKMI HQHLSSRTHG SEDS

#### **General References**

Gui G., et al. (2017) Clin Immunol. 183:266-272. Parrish-Novak J., et al. (2000) Nature. 408(6808):57-63.

### DATA

#### SDS-PAGE

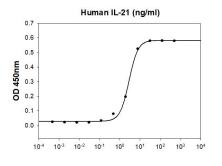


**Biological Activity** 

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

NKMAXBiO We support you, we believe in your research Recombinant human IL-21 protein

Catalog Number: ATGP3861



Human IL-21 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range  $\leq$ 4 ng/ml.