

## IL-21 Protein, Mouse, Recombinant V2

### General Information

Synonyms:	IL-21
Protein Construction:	Pro25-Ser146 Expressed with an N-terminal Met
Species:	Mouse
Expression Host:	E. coli
Accession:	Q9ES17-1
Molecular Weight:	15.1 kDa (Reducing conditions)

### QC Testing

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 <sup>6</sup> units/mg.
Purity:	> 98% as determined by SDS-PAGE
Endotoxin:	< 0.2 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22 μm filtered solution in PBS.

### Preparation and Storage

#### Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

#### Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481