

## Recombinant Human Interleukin-21/IL-21 Protein

Catalog No. PKSH031514

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

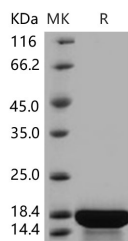
### Description

|                                    |  |
|------------------------------------|--|
| <b>Synonyms</b>                    | Interleukin-21;IL-21;Za11;IL21   |
| <b>Species</b>                     | Human  |
| <b>Expression Host</b>             | E.coli   |
| <b>Sequence</b>                    | Gln30-Ser162   |
| <b>Accession</b>                   | Q9HBE4-1   |
| <b>Calculated Molecular Weight</b> | 15.6 kDa   |
| <b>Observed molecular weight</b>   | 17 kDa   |
| <b>Tag</b>                         | None   |
| <b>Bioactivity</b>                 | Measured by its ability to induced Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED50 for this effect is 0.4-2 ng/mL. |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 5 EU per mg of the protein as determined by the LAL method.   |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.                                 |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.   |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 7.4, 5 % Trehalose, 5 % Mannitol 0.01% Tween 80<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

IL21 belongs to the IL-15/IL-21 family. It is a cytokine with immunoregulatory activity. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate (monocytes, macrophages, dendritic cells) and adaptive (T- and B-cells) immune systems. IL21 is expressed in activated CD4-positive T-cells but not in CD8-positive T-cells, B-cells, or monocytes. It may promote the transition between innate and adaptive immunity. IL-21 has been tried as therapy for alleviating allergic responses. It can significantly decrease pro-inflammatory cytokines produced by T cells in addition to decreasing IgE levels in a mouse model for rhinitis (nasal passage inflammation)