

RP01708

Leader in Biomolecular Solutions for Life Science



Recombinant Human IL-21 Protein

Catalog No.: RP01708

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	59067	Q9HBE4

Tags

No-tag

Synonyms

Za11; IL-21; CVID11;IL21

Product Information

Source

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Purification

≥ 90 % as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of

Background

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 a 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).

Basic Information

Description

Recombinant Human IL-21 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln32-Ser162) of human IL-21 (Accession #NP_068575.1) fused with no additional amino acid.

Bio-Activity

Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED₅₀ for this effect is 2.7-10.8 ng/mL, corresponding to a specific activity of $9.3 \times 10^4 \sim 3.7 \times 10^5$ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C
Avoid repeated freeze/thaw cycles.

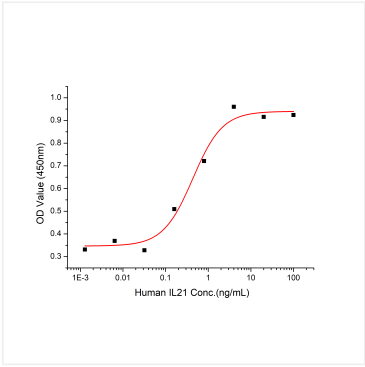
0.1-0.5 mg/mL in sterile distilled water.
Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

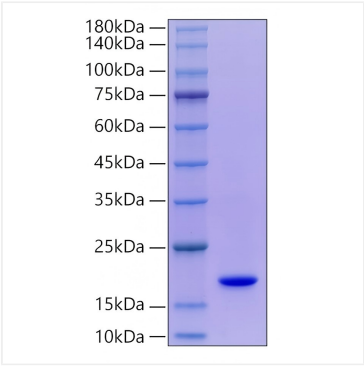


www.abclonal.com

Validation Data



Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED₅₀ for this effect is 0.215-0.86 ng/mL, corresponding to a specific activity of $1.16 \times 10^6 \sim 4.65 \times 10^6$ units/mg.



Recombinant Human IL-21 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.