

Recombinant Rat IL-21 Protein

Catalog No.: RP01756

Sequence Information

Species **Gene ID**
Rat 365769

Swiss Prot **Tags**
A3QPB9 C-6His

Synonyms
Za11; IL-21; CVID11

Product Information

Source **Purification**
HEK293 cells ≥ 90% as
 determined by
 SDS-PAGE.

Calculated MWObserved MW
16.03 kDa 15–35 kDa

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
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.

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 Rat IL-21 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (His18-Ser146) of rat IL-21 (Accession #NP_001102413.1) fused with a 6×His tag at the C-terminus.

Activity

Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED₅₀ for this effect is 0.45–1.8 ng/mL, corresponding to a specific activity of 5.6×10⁵~2.2×10⁶ 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.

Storage

Store at -20°C

Operational Notes

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

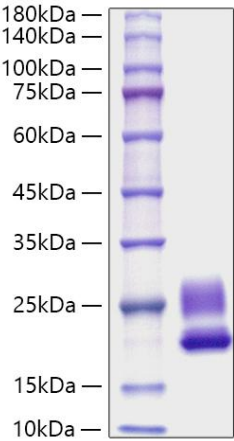
Contact

☎ | 400-999-6126

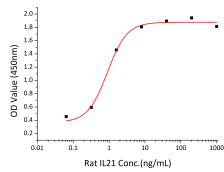
✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Validation Data



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



Recombinant Rat IL-21 induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED₅₀ for this effect is 0.45-1.8 ng/mL, corresponding to a specific activity of $5.6 \times 10^5 \sim 2.2 \times 10^6$ units/mg.