

## Recombinant human IL-21 protein (Active, CHO)

Catalog Number: bs-48057P

Species: Human

AA Seq: 25-162/162

Predicted MW: 15.9

Tags: Tag free

Activity: Yes

Endotoxin:  $\leq 10$  EU/mg

Purity:  $\geq 95\%$  as determined by SDS-PAGE.

Purification: AC

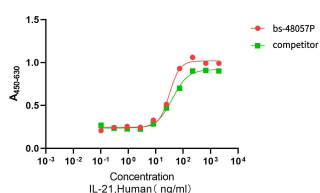
Form: Lyophilized

Storage: PBS, 5% Mannitol and 0.01% Tween 80 (pH=7.4)

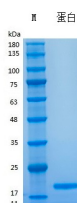
Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 36 months at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  in lyophilized state. 6 months at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  under sterile conditions after reconstitution. 7-10 days at  $2^{\circ}\text{C}$  to  $8^{\circ}\text{C}$  under sterile conditions after reconstitution.

**Background:** IL-21 is a typical family I cytokine with broad pleiotropic actions and is primarily produced by T follicular helper cells, Th17, and natural killer T cells in response to antigenic stimulation. IL-21 generally enhances antigen-specific responses of immune cells. It controls the activation, proliferation, differentiation, cytotoxicity, and survival of various target immune cells. Additionally, IL-21 promotes the anti-tumor activity of CD8+ T-cells and NK cells. IL-21 elicits its effect through binding to IL-21R, which also contains the gamma chain found in other cytokine receptors such as IL-2, IL-4, IL-7, IL-9 and IL-15. IL-21/IL-21R interaction triggers a cascade of events, which includes activation of the tyrosine kinases JAK1 and JAK3, followed by activation of the transcription factors STAT1 and STAT3. Recombinant Human IL-21 is a 15.4 kDa protein consisting of 132 amino acid residues.

### VALIDATION IMAGES



Measured by its ability to enhance IFN-gamma secretion in NK-92 human natural killer lymphoma cells. The ED50 for this effect is  $\leq 20$



The purity of the protein is greater than 95% as determined by reducing SDS-PAGE.

ng/mL.