

CHASELECTION**Recombinant Human IL21****货号(Catalog Number):** CY182FXXXX(L)**别名(synonym):** Human IL21; IL21; IL-21; interleukin 21; interleukin-21 isoform; Za11**来源(Source):** Human embryonic kidney cell, HEK293-derived human IL-21 protein**蛋白结构 (Structure):**

该蛋白不含标签

基因 ID: Q9HBE4.3**氨基酸序列:**

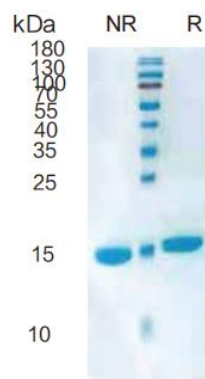
Gln32-Ser162

分子量大小(MW):

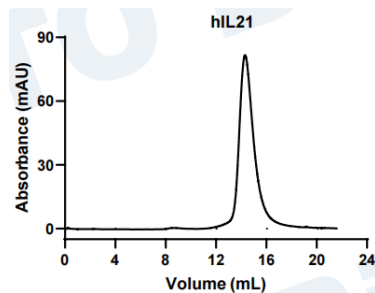
15.5 kDa

纯度 (Purity) :

> 95%, determined by SDS-PAGE.

SDS-PAGE

4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

Gel filtration

Size-exclusion chromatography of recombinant human IL21 protein (280 nm absorbance)



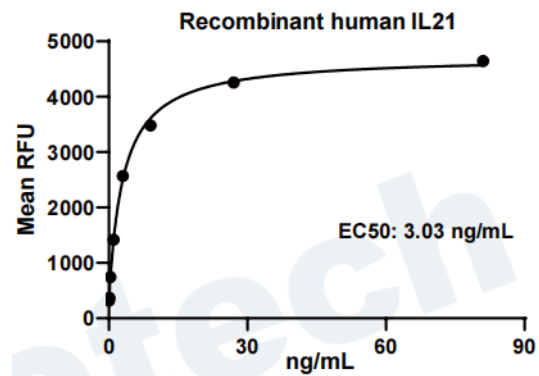
内毒素含量 (Endotoxin) : <0.010 EU per 1 ug of the protein by the LAL method.

制剂(Formulation):

Solution protein.

Dissolved in sterile PBS buffer.

This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.

活性检测 (Biological Activity) :

Recombinant human IL21 enhances IFN-gamma secretion in NK-92 human natural killer lymphoma cells.

储存与运输(Storage):

Avoid repeated freeze-thaw cycles.

It is recommended that the protein be aliquoted for optimal storage.

36 months from date of receipt, -20 to -70 °C as supplied.

产品背景介绍 (Production):

Interleukin-21 (IL-21) is a potent cytokine regulating many cell types of the immune system. IL-21 is produced by activated T follicular helper cells (Tfh), Th17 cells, and NKT cells. Tfh-derived IL-21 plays an important role in the development of humoral immunity through its autocrine effects on the Tfh cell and paracrine effects on immunoglobulin affinity maturation, plasma cell differentiation, and B cell memory responses. IL-21 protein regulates several aspects of T cell function. It co-stimulates the activation, proliferation, and survival of CD8+ T cells and NKT cells and promotes Th17 cell polarization. IL-

IL-21 blocks the generation of regulatory T cells and their suppressive effects on CD4⁺ T cells. In addition to its role in T cell biology, IL-21 also plays a critical role in B cell activation, proliferation, differentiation, and apoptosis. IL-21 protein exerts its biological effects through a heterodimeric receptor complex of gamma c and the IL-21-specific IL-21 R. IL-21 is an approximately 14 kDa four-helix-bundle member of the family of cytokines that utilize the common gamma chain (gamma c) as a receptor subunit. gamma c is also a subunit of the receptors for IL-2, IL-4, IL-7, IL-9, and IL-15. IL-21 R engagement enhances the cytolytic activity and IFN-gamma production of activated NK cells but limits the expansion of resting NK cells. Dysregulation of the IL-21/IL-21 R system contributes to the development of multiple immunological disorders. The 133 amino acid (aa) mature human IL-21 protein shares 63% and 61% aa sequence identity with mouse and rat IL-21 protein, respectively. Alternative splicing generates an additional isoform with a substitution of the C-terminal 16 amino acids.

