

Datasheet for ABIN6700077

IL-21 Protein**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	IL-21 (IL21)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Interleukin-21 Recombinant Protein
Purification:	Interleukin-21 purity was determined to be greater than 95% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Purity:	95,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the dose-dependent stimulation of B9 cells and is typically less than 50 ng/mL.

Target Details

Target:	IL-21 (IL21)
Alternative Name:	IL21 (IL21 Products)
Background:	Synonyms: Za11 Background: Interleukin-21 (IL-21) is a member of the common gamma-chain family of

Target Details

cytokines (includes IL-2, IL-4, IL-7, IL-9, IL-13, and IL-15) and is expressed by activated CD4+ T cells. IL-21 has a private receptor known as IL-21R, which is expressed on T, B, and NK cells. Within the B cell lineage, IL-21 regulates IgG1 production and cooperates with IL-4 for the production of multiple Ab classes in vivo. Initial studies have demonstrated that IL-21 has pleiotropic effects on the proliferation, differentiation, and effector functions of B, T, natural killer, and dendritic cells. Recombinant human IL-21 is a non-glycosylated protein, containing 133 amino acids, with a total molecular weight of 15.5 kDa.

UniProt: [Q9HBE4](#)

Pathways: [JAK-STAT Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#)

Application Details

Application Notes: Other: User Optimized
Application_Note: Interleukin-21 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-21 in immunological assays.

Comment: Suggested_Applications: Cellular Assay
Other_Performance_Data:

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution_Buffer: Restore with deionized water (or equivalent)
Reconstitution_Volume: 100 µL

Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5
Stabilizer: None

Preservative: Without preservative

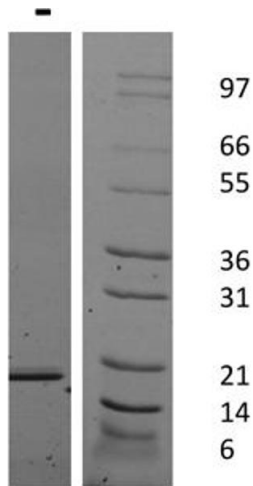
Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each

opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

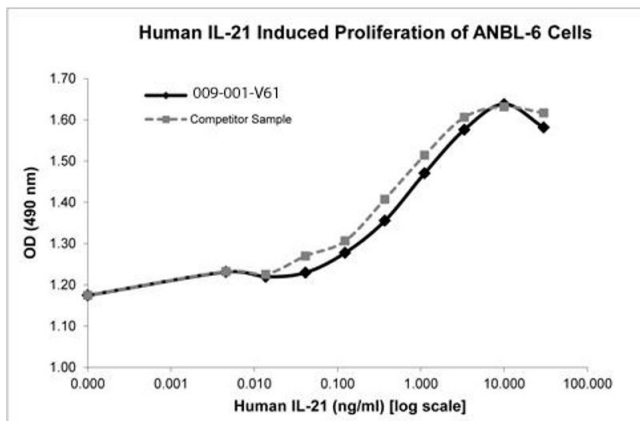
Expiry Date: 6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Interleukin-21 Recombinant Protein SDS-PAGE of Human Interleukin-21 Recombinant Protein. Lane 1: 1 µg Human IL-20 in non-reducing conditions . Lane 2: Molecular weight marker. Human IL-21 has a predicted MW of 15 kDa.



SDS-PAGE

Image 2. SDS-PAGE of Human Interleukin-21 Recombinant Protein Bioactivity of Human Interleukin-21 Recombinant Protein. Serial dilutions of Human IL-21 (starting at 30 ng/mL) were added to ANBL-6 cells. After 84 hours, cell proliferation was measured and the linear portion of the curve was used to calculate the ED50. The ED50 of Human IL-21 is between 0.48-0.73 ng/mL.