

Datasheet for ABIN5674598

IL-21 Protein (AA 30-162) (Fc Tag,AVI tag,Biotin)[Go to Product page](#)**2** Images

Overview

Quantity:	200 µg
Target:	IL-21 (IL21)
Protein Characteristics:	AA 30-162
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL-21 protein is labelled with Fc Tag,AVI tag,Biotin.

Product Details

Brand:	PrecisionAvi
Sequence:	AA 30-162
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	This protein carries a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag™). The protein has a calculated MW of 43.9 kDa. The protein migrates as 36 kDa and 48-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	IL-21 (IL21)
Alternative Name:	IL-21 (IL21 Products)
Background:	<p>Interleukin-21 (IL-21) is a secreted protein which belongs to the IL-15 / IL-21 family. Interleukin-21 / IL-21 belongs to a family of cytokines that bind to a composite receptor consisting of a private receptor (IL21R) and the common cytokine receptor gamma chain (gamma(C)).</p> <p>Interleukin-21 / IL-21 impacts a number of cell types, including CD8+ memory T cells, NK cells and subsets of CD4 memory T cells. The IL-21R is widely distributed on lympho-haematopoietic cells. IL-21 is a pleiotropic cytokine produced by CD4+ T cells in response to antigenic stimulation. Its action generally enhances antigen-specific responses of immune cells. IL-21 promotes the anti-tumor activity of CD8+ T-cells and NK cells. IL-21 exerts its effect through binding to a specific type I cytokine receptor, IL-21R, which also contains the γ chain (γc) found in other cytokine receptors including IL-2, IL-4, IL-7, IL-9 and IL-15. The 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.</p>
Molecular Weight:	43.6 kDa
NCBI Accession:	NP_001193935
Pathways:	JAK-STAT Signaling , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Production of Molecular Mediator of Immune Response

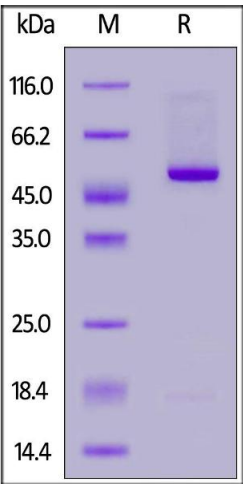
Application Details

Comment:	<p>Ready-to-use AvitagTM biotinylated protein:</p> <p>The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.</p> <p>This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.</p>
Restrictions:	For Research Use only

Handling

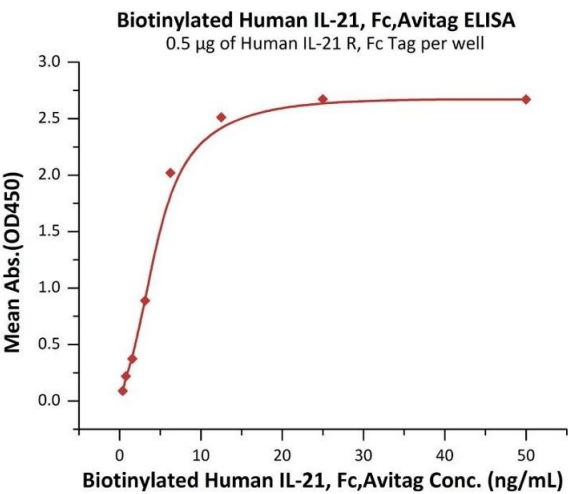
Format:	Lyophilized
Buffer:	50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images



SDS-PAGE

Image 1. Biotinylated Human IL-21, Fc,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .



ELISA

Image 2. Immobilized Human IL-21 R, Fc Tag (ABIN2181374,ABIN2181373) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-21, Fc,Avitag (ABIN5674598,ABIN6253717) with a linear range of 0.4-6 ng/mL (QC tested).