

Datasheet for ABIN3137668

IL-4 Protein (AA 25-153) (His tag,AVI tag,Biotin)



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3 Images

Overview

Quantity:	200 µg
Target:	IL-4 (IL4)
Protein Characteristics:	AA 25-153
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL-4 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Sequence:	AA 25-153
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 an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag. The protein has a calculated MW of 17.6 kDa. As a result of glycosylation, the protein migrates as 22 kDa under reducing (R) condition, and 21 kDa under non-reducing (NR) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	IL-4 (IL4)
Alternative Name:	IL4 (IL4 Products)
Background:	Interleukin-4, is a cytokine that induces differentiation of naive helper T cells (Th0 cells to Th2 cells). In the presence of IL-4 and IL-13, cytokines that are produced in a Th-2 type response, particularly during allergy and parasitic infections, macrophages become differentially activated, And this cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. Recently, researcher found that the cytokine IL-4 plays a key role in development of innate CD8+ T cells in the thymus of several gene-deficient mouse strains, including Itk, KLF2, CBP and Id3, without previous exposure to antigen.
Molecular Weight:	17.6 kDa
Pathways:	JAK-STAT Signaling , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Production of Molecular Mediator of Immune Response , Proton Transport , Activated T Cell Proliferation

Application Details

Comment:	Ready-to-use Avitag™ biotinylated protein: The product is exclusively produced using the Avitag™ 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. 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.
Restrictions:	For Research Use only

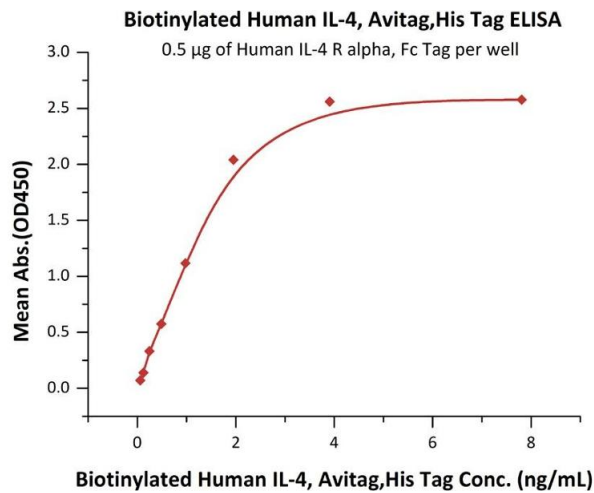
Handling

Format:	Lyophilized
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Handling

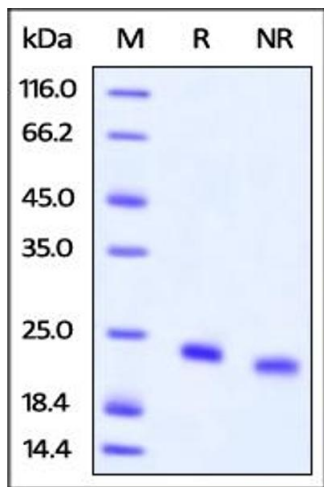
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images



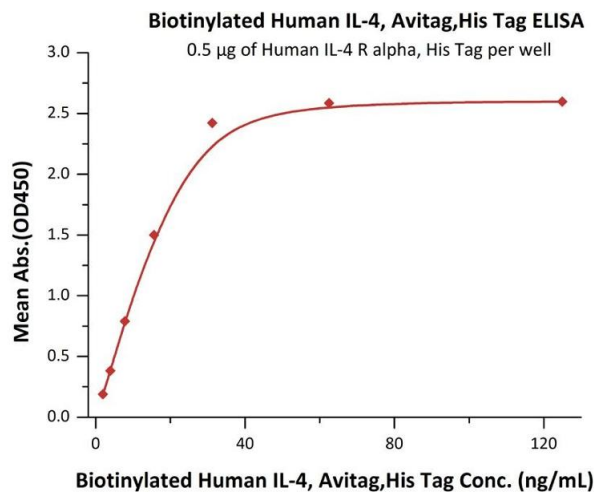
ELISA

Image 1. Immobilized Human IL-4 R alpha, Fc Tag (ABIN6731257,ABIN6809937) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-4, Avitag,His Tag (ABIN3137668,ABIN5674029) with a linear range of 0.1-2 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human IL-4, Avitag,His Tag on under reducing (R) and ing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .



ELISA

Image 3. Immobilized Human IL-4 R alpha, His Tag (ABIN2181320,ABIN2181319) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-4, Avitag,His Tag (ABIN3137668,ABIN5674029) with a linear range of 1.95-15.6 ng/mL (QC tested).