Datasheet for ABIN6950979

IL-13 Protein (AA 21-132) (His tag,AVI tag,Biotin)

3 Images

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Overview

Quantity:	200 µg
Target:	IL-13 (IL13)
Protein Characteristics:	AA 21-132
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL-13 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Sequence:	AA 21-132
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	IL-13 (IL13)
Alternative Name:	IL-13 (IL13 Products)
Background:	Interleukin 13 (IL13) is also known as ALRH, BHR1and P600, is a single-chain glycosylated

Target Details

	polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R α) and at least one of two known IL-13-specific binding chains. The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. IL-13 induces matrix metalloproteinases (MMPs) as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation. IL-13 induces many features of allergic lung disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, which all contribute to airway obstruction.
Molecular Weight:	15.9 kDa
NCBI Accession:	NP_002179
Pathways:	JAK-STAT Signaling, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Proton Transport

Application Details

Comment:	Ready-to-use AvitagTM biotinylated protein: 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. 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

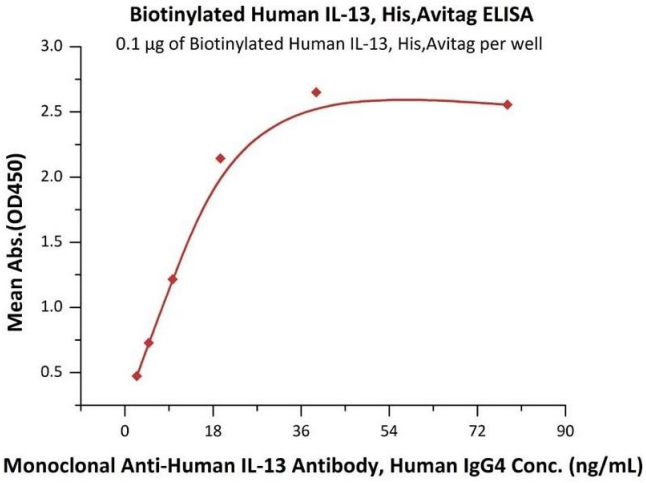
Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.

Handling

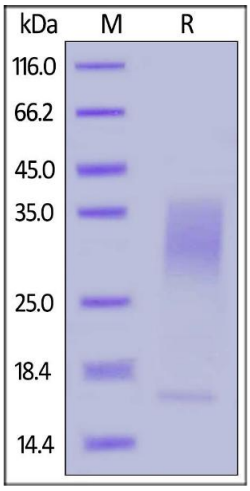
Storage:	-20 °C

Images



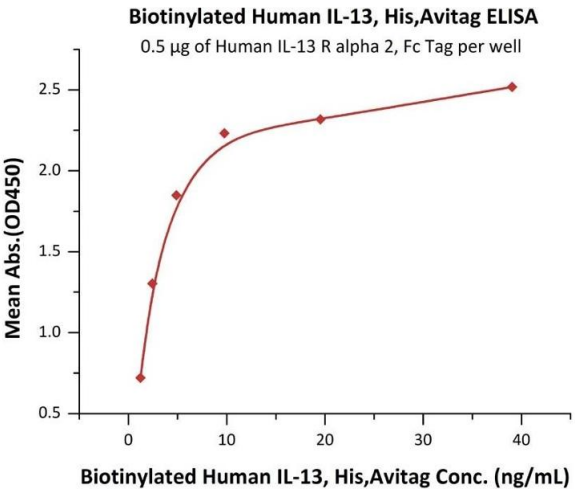
ELISA

Image 1. Immobilized Biotinylated Human IL-13, His,Avitag (ABIN6950979,ABIN6952280) at 1 μg/mL (100 μL/well) on Streptavidin precoated (0.5 μg/well) plate can bind Monoclonal A IL-13 Antibody, Human IgG4 with a linear range of 0.3-20 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human IL-13, His,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .



ELISA

Image 3. Immobilized Human IL-13 R alpha 2, Fc Tag at 5 μg/mL (100 μL/well) can bind Biotinylated Human IL-13, His,Avitag (ABIN6950979,ABIN6952280) with a linear range of 0.2-5 ng/mL (QC tested).