

Datasheet for ABIN6973128

IL-5 Protein (AA 20-134) (His tag, AVI tag, Biotin)

Images



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Overview	
Quantity:	200 μg
Target:	IL-5 (IL5)
Protein Characteristics:	AA 20-134
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL-5 protein is labelled with His tag,AVI tag,Biotin.
Product Details	
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine
	residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Biotinylated Human IL-5 Protein, His,Avitag™
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.
Target Details	
Target:	IL-5 (IL5)
Alternative Name:	IL-5 (IL5 Products)
Background:	Interleukin 5 (IL5) is an interleukin produced by type-2 T helper cells and mast cells. IL-5 is a

115-amino acid (in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely interleukin 3 and GM-CSF), this glycoprotein in its active form is a homodimer. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma, wherein a large increase in the number of circulating, airway tissue, and induced sputum eosinophils have been observed. Given the high concordance of eosinophils and, in particular, allergic asthma pathology, it has been widely speculated that eosinophils have an important role in the pathology of this disease. Drugs that target IL-5 are mepolizumab and reslizumab.

Molecular Weight:

16.7 kDa

Pathways:

JAK-STAT Signaling, Positive Regulation of Peptide Hormone Secretion, Production of Molecular Mediator of Immune Response, Feeding Behaviour

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.

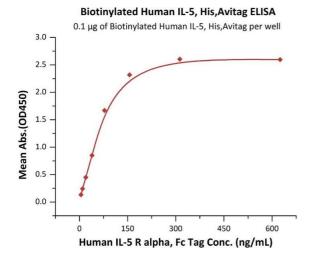
This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

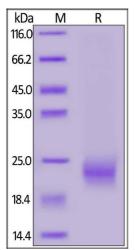
Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.3
Storage:	-20 °C





ELISA

Image 1. Immobilized Biotinylated Human IL-5, His,Avitag (ABIN6973128) at 1 μ g/mL (100 μ L/well) on Recombinant Streptavidin precoated (0.5 μ g/well) plate, can bind Human IL-5 R alpha, Fc Tag (ABIN6923185,ABIN6938892) with a linear range of 5-78 ng/mL (QC tested).

SDS-PAGE

Image 2. Biotinylated Human IL-5, His,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 %.