Datasheet for ABIN6973104

IL12 Protein (AA 23-328) (His tag,AVI tag,DYKDDDDK Tag,Biotin)

3 Images

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Overview

Quantity:	200 µg
Target:	IL12
Protein Characteristics:	AA 23-328
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL12 protein is labelled with His tag,AVI tag,DYKDDDDK 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-12B&IL-12A Heterodimer Protein, His,Avitag™&Flag Tag
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	IL12
Alternative Name:	IL-12B & IL-12A (IL12 Products)
Background:	Interleukin 12 (IL12) is also known as p70, and is an interleukin that is naturally produced by

Target Details

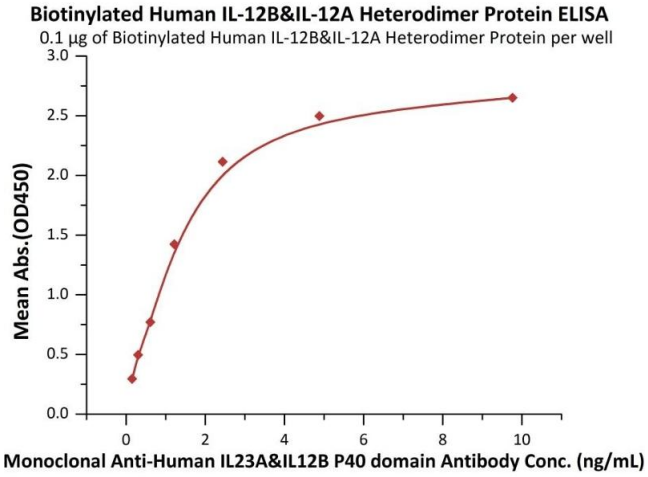
	dendritic cells, macrophages and human B-lymphoblastoid cells (NC-37) in response to antigenic stimulation.IL12 is a heterodimeric cytokine, containing IL-12A (p35) and IL-12B (p40). IL-12 is involved in the differentiation of naive T cells into Th1 cells. It is known as a T cell-stimulating factor, which can stimulate the growth and function of T cells. It stimulates the production of IFN-γ and TNF-α from T cells and NK cells, and reduces IL-4 mediated suppression of IFN-γ. IL-12 plays an important role in the activities of natural killer cells and T lymphocytes. IL-12 also has anti-angiogenic activity, which means it can block the formation of new blood vessels.
Molecular Weight:	38.3 kDa | 23.8 kDa
Pathways:	JAK-STAT Signaling, TLR Signaling, Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Activated T Cell Proliferation, Cancer Immune Checkpoints, Inflammasome

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

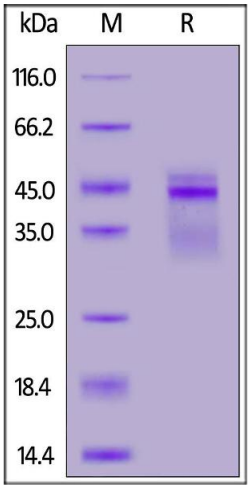
Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-20 °C



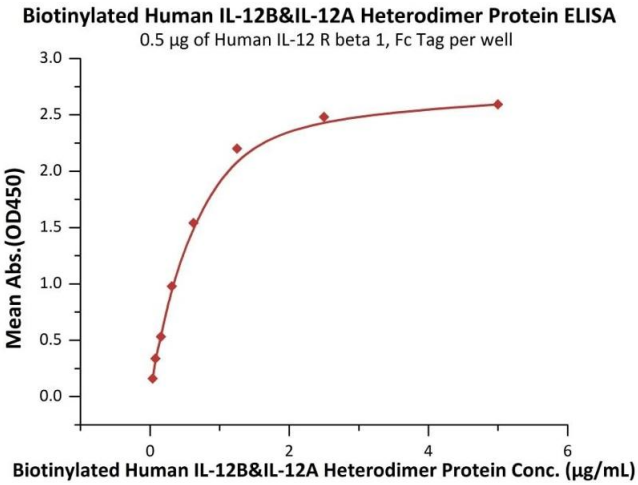
ELISA

Image 1. Immobilized Biotinylated Human IL-12B&IL-12A Heterodimer Protein, His,Avitag&Flag Tag (ABIN6973104) at 1 µg/mL (100 µL/well)on streptavidin precoated (0.5 µ g/well) plate. can bind Monoclonal A IL23A&IL12B P40 domain Antibody, Human IgG1 with a linear range of 0.2-1 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human IL-12B&IL-12A Heterodimer Protein, His,Avitag™&Flag Tag 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-12 R beta 1, Fc Tag (ABIN6731330,ABIN6809859) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-12B&IL-12A Heterodimer Protein, His,Avitag&Flag Tag (ABIN6973104) with a linear range of 0.039-0.625 µg/mL (QC tested).