

Datasheet for ABIN6731329

## IL12RB1 Protein (AA 24-540) (Fc Tag,AVI tag,Biotin)



[Go to Product page](#)

### 3 Images

#### Overview

Quantity:	200 µg
Target:	IL12RB1
Protein Characteristics:	AA 24-540
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL12RB1 protein is labelled with Fc Tag,AVI tag,Biotin.

#### Product Details

Sequence:	AA 24-540
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Purity:	>95 % as determined by reduced SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

#### Target Details

Target:	IL12RB1
Alternative Name:	IL-12 R beta 1 ( <a href="#">IL12RB1 Products</a> )
Background:	The human IL-12 R subunit is a member of the cytokine receptor superfamily and the functional

## Target Details

high-affinity IL-12R is composed of at least two beta-type cytokine receptor subunits, each independently exhibiting a low affinity for IL-12. IL-12 R beta 1 (Interleukin-12 receptor subunit beta-1) is also known as IL-12RB1, CD212. Functions as an interleukin receptor which binds interleukin-12 with low affinity and is involved in IL12 transduction. Associated with IL12RB2 it forms a functional, high affinity receptor for IL12. Associates also with IL23R to form the interleukin-23 receptor which functions in IL23 signal transduction probably through activation of the Jak-Stat signaling cascade.

Molecular Weight: 85.3 kDa

NCBI Accession: [NP\\_005526](#)

Pathways: [JAK-STAT Signaling](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Activated T Cell Proliferation](#)

## Application Details

Comment: Ready-to-use Avitag<sup>TM</sup> biotinylated protein:  
The product is exclusively produced using the Avitag<sup>TM</sup> 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

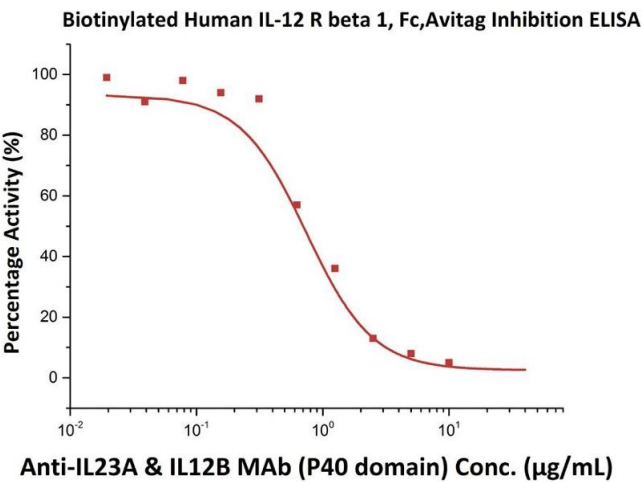
## Handling

Format: Lyophilized

Buffer: Tris with Glycine, Arginine and NaCl, pH 7.5

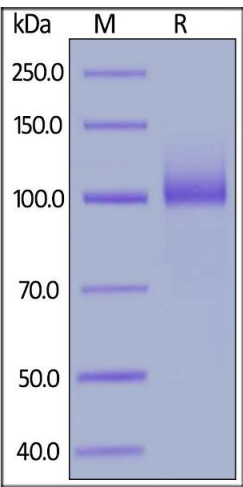
Handling Advice: Please avoid repeated freeze-thaw cycles.

Storage: -20 °C



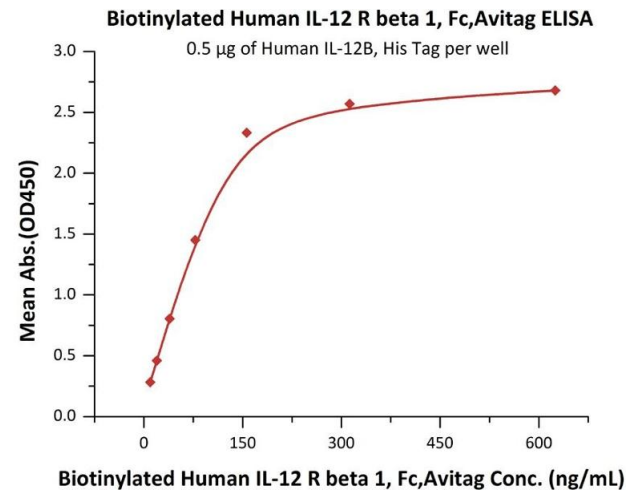
**ELISA**

**Image 1.** Immobilized Human IL-12B, His Tag (ABIN2181334,ABIN3071755,ABIN6810016) at 2 µg/mL (100 µL/well), can bind increasing concentrations of A & IL12B MAb (P40 domain) and 0.4 µg/mL (100 µL/well) Biotinylated Human IL-12 R beta 1, Fc,Avitag (ABIN6731329,ABIN6809867) with a half maximal inhibitory concentration(IC50) of 0.83 µg/mL (Routinely tested).



**SDS-PAGE**

**Image 2.** Biotinylated Human IL-12 R beta 1, 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 3.** Immobilized Human IL-12B, His Tag (ABIN2181334,ABIN3071755,ABIN6810016) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-12 R beta 1, Fc,Avitag (ABIN6731329,ABIN6809867) with a linear range of 10-78 ng/mL (QC tested).