

Datasheet for ABIN7321253

IL12 Protein (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	IL12
Origin:	Rat
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL12 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Rat Interleukin-12/IL-12 Protein (His Tag)
Sequence:	Met23-Ser335
Characteristics:	Recombinant Rat Interleukin-12 is produced by our Mammalian expression system and the target gene encoding Met23-Ser335(p40)&Arg23-Ser215(p35) is expressed with a 6His tag at the C-terminus.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin Level:	<1.0 EU per µg as determined by LAL test.

Target Details

Target:	IL12
Alternative Name:	Interleukin-12/IL-12 (IL12 Products)
Background:	Background: Interleukin 12 (IL-12) is the founding member of the IL-12 family of heterodimeric cytokines, which have important immunological functions. IL-12 is composed of two disulfide-

Target Details

linked subunits of 35 kDa and 40 kDa, respectively. The 35 kDa subunit (p35) is an α -helical protein homologous to IL-6 and GCSF. The 40 kDa subunit (p40) contains one fibronectin type III and one Ig C2-like domain, and has a high degree of structural homology to type I cytokine receptors. Whereas p35 subunit is unique to IL-12, the p40 subunit is also utilized in IL-23. Mature rat p35 is a 194 amino acids (aa) protein that is secreted as a heterodimer linked to p40. It contains three potential N-linked glycosylation sites and shares 86 %, and 58 % aa sequence identity with mouse and human p35, respectively. Mature rat p40 contains 313 aa and can exist in multiple forms, including monomer, homodimer, heterodimer linked to p19 (forming IL23), and heterodimer linked to p35 (forming IL-12). IL12 facilitates hematopoietic stem cell proliferation, induces NK cell proliferation, and potentiates the expansion and late activation of Th1 CD4+ T cells.

Synonym: Interleukin-12, IL-12

Molecular Weight: 36.7&22.6 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

Restrictions: For Research Use only

Handling

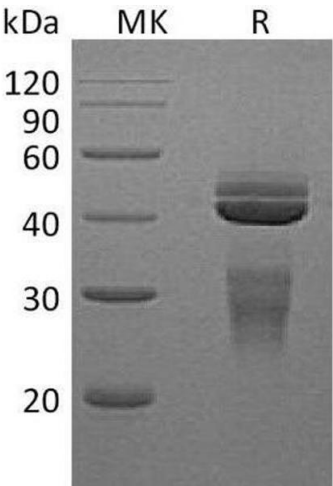
Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.