

Datasheet for ABIN1019696
IL12B Protein (AA 23-328) (His tag)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µg
Target:	IL12B
Protein Characteristics:	AA 23-328
Origin:	Human
Source:	Tobacco (Nicotiana benthamiana)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL12B protein is labelled with His tag.
Application:	Western Blotting (WB), Immunogen (Imm)

Product Details

Sequence:	HHHHHHIWEL KKDYYVVELD WYPDAPGEMV VLTCDTPEED GITWTLDQSS EVLGSGKTLT IQVKEFGDAG QYTCHKGGEV LSHSLLLLHK KEDGIWSTDI LKDQKEPKNK TFLRCEAKNY SGRFTCWHLT TISTDLTFSV KSSRGSSDPQ GVTGGAATLS AERVGRDNKE YEYSVEQCED SACPAAEESL PIEVMVDAVH KLKYENYTSS FFIRDIKPD PPKNLQLKPL KNSRQVEVSW EYPDTWSTPH SYFSLTFCVQ VQGKSKREKK DRVFTDKTSA TVICRKNASI SVRAQDRYYS SSWSEWASVP CS
Specificity:	Serological Identification: The protein was electrophoresed under reducing condition on a 15 % SDS-polyacrylamide gel, transferred by electro blotting to a NC membrane and visualized by immune-detection with specific IL12 antibody.
Characteristics:	Molecular Formula: C1575H2420N424O490S12 Isoelectric Point: 5,91 Extinction Coefficient: E 0.1 % (1g/L) = 2.069 (A 280 nm)

Product Details

	This product contains no animal-derived components or impurities. Produced by transient expression of Interleukin-12 subunit p40 in non-transgenic plants.
Purification:	Recombinant human Interleukin-12 subunit p40 contains a 6-His-tag at the N-terminal end and is purified by sequential chromatography (FPLC).
Purity:	> 97 % by SDS polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.
Endotoxin Level:	< 0.04 EU/µg protein (LAL method)

Target Details

Target:	IL12B
Alternative Name:	IL12B (IL12B Products)
Background:	Interleukin-12 (IL-12) is a heterodimer cytokine composed of p40 and p35 subunits. It is mainly produced by macrophages, dendritic cells, and B cells. It has multiple effects on T and natural killer (NK) cells. In particular it appears to be a major factor for the development of cellular immunity. IL-12 stimulates the production and secretion of several cytokines, in particular IFN-gamma, by NK cells and T cells, induces proliferation and enhances the cytotoxic activity within these cell populations. The p40 subunit of IL-12 interacts with the beta subunit of IL-12R and the disulfide linked p40 homodimer specifically antagonize the activity of bioactive IL-12 in different assay systems.
Molecular Weight:	35.5 kDa
Gene ID:	3593, 161561
UniProt:	P29460
Pathways:	JAK-STAT Signaling , Cellular Response to Molecule of Bacterial Origin , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Activated T Cell Proliferation

Application Details

Comment:	Biological Activity: The biological activity of IL12 p40 is determined by the dose dependent inhibition of IL-12 dependent IFN-gamma production (mouse splenocytes). No tested Recombinant human Interleukin-12 p40 is a glycosylated polypeptide chain containing 312 amino acids (fragment 23 - 328 P29460 IL12B_HUMAN) with an amino- terminal hexahistidine tag. The recombinant protein has a predicted molecular mass of 35.5kDa, however as a result
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Application Details

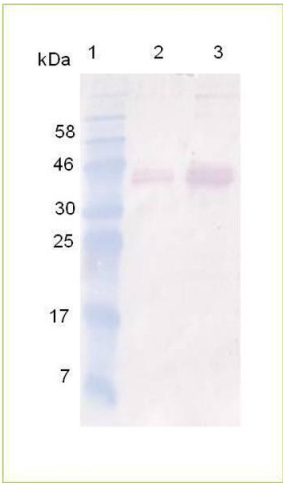
of potential glycosylation, the molecular mass could be approximately 40kDa by SDSPAGE under reducing conditions. Human recombinant protein expressed in *Nicotiana benthamiana*. Recombinant human Interleukin-12 subunit p40 contains a 6-His-tag at the N-terminal end, is produced by transient expression in non-transgenic plants and is purified by sequential chromatography (FPLC). This product contains no animal-derived components or impurities. Animal free product.

Restrictions: For Research Use only

Handling

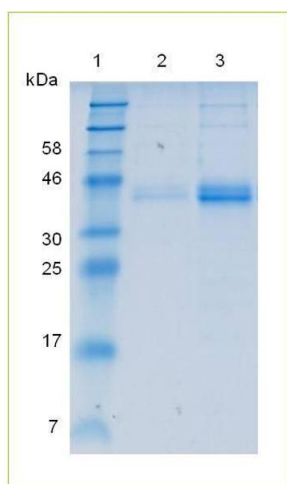
Format:	Lyophilized
Reconstitution:	Lyophilized protein should be reconstituted in water to a concentration of 50 ng/μL. Upon reconstitution, It can be stored in working aliquots at -20 °C for future use.
Buffer:	20 mM PBS buffer at pH 7.4
Storage:	4 °C

Images



Western Blotting

Image 1. Western Blot analysis of recombinant IL12p40. Lane 1: Molecular weight marker (kDa), lane 2-3: 0.1 μg and 0.5 μg of IL12p40.



SDS-PAGE

Image 2. SDS-PAGE analysis of recombinant IL12 p40. Samples were loaded in 15 % SDS-polyacrylamide gel and stained with Coomassie blue. Lane1: Molecular weight marker (kDa), lane 2-3: contains 0.1 μ g and 0.5 μ g of recombinant IL12 p40.