

Datasheet for ABIN5853918

IL12 Protein (AA 23-219, AA 23-328) (His tag)





Overview

Quantity:	50 μg
Target:	IL12
Protein Characteristics:	AA 23-219, AA 23-328
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL12 protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

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Product Details	
Sequence:	* IL-12 is a heterodime r of IL12A and IL12B linked through a disulfide-bond between cysteines
	in red in below sequences.
	IL12A(p35)
	RNLPVATPDP GMFPCLHHSQ NLLRAVSNML QKARQTLEFY PCTSEEIDHE DITKDKTSTV
	EACLPLELTK NESCLNSRET SFITNGSCLA SRKTSFMMAL CLSSIYEDLK MYQVEFKTMN
	AKLLMDPKRQ IFLDQNMLAV IDELMQALNF NSETVPQKSS LEEPDFYKTK IKLCILLHAF
	RIRAVTIDRV MSYLNASHHH HHH
	IL12B(p40)
	IWELKKDVYV VELDWYPDAP GEMVVLTCDT PEEDGITWTL DQSSEVLGSG KTLTIQVKEF
	GDAGQYTCHK GGEVLSHSLL LLHKKEDGIW STDILKDQKE PKNKTFLRCE AKNYSGRFTC
	WWLTTISTDL TFSVKSSRGS SDPQGVTCGA ATLSAERVRG DNKEYEYSVE CQEDSACPAA

Product Details

	EESLPIEVMV DAVHKLKYEN YTSSFFIRDI IKPDPPKNLQ LKPLKNSRQV EVSWEYPDTW STPHSYFSLT FCVQVQGKSK REKKDRVFTD KTSATVICRK NASISVRAQD RYYSSSWSEW ASVPCS
Purity:	> 90 % by SDS - PAGE
Endotoxin Level:	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Biological Activity Comment:	The activity is determined by the IFN-g ELISA in a using NK-92 cell. The ED50 for this effect is less than or equal to 0.03 ng/ml.

Target Details

Target:	IL12
Alternative Name:	IL12 (IL12 Products)
Background:	IL12 is a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. It is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit and a 35 kD subunit. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. IL12 has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen. Recombinant human IL12 protein, fused to His-tag at C-terminus, was expressed in insect cells using baculovirus expression system and purified by using conventional chromatography techniques.
Molecular Weight:	34.6kDa (p40) & 23.3kDa (p35) (306aa & 203aa) The heterodimeric IL12 has a predicted molecular weight of 57.9kDa (509aa). Molecular weight on SDS-PAGE will appear higher.
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

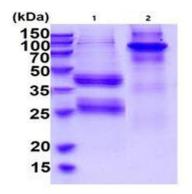
Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Bioactivity Validated
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10 % glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

Images



15% SDS-PAGE (3ug)

Lane 1: reducing conditions

Lane 2: non-reducing conditions

SDS-PAGE

Image 1.