Recombinant Mouse Interleukin 12 Protein, His tagged

Cat. No. IL12-21M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse IL12b/IL12a protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
Species	Mouse
Source	Baculovirus
ProteinLength	23-335aa(p40)/23-215aa(p35)
Description	IL12b/IL12a, also known as interleukin 12 (subunit beta/alpha), is a cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC. It is a key mediator of cellular-immunity and induces the differentiation of Th1 cells from precursor T helper cells. As it is associated with IL23A to form the IL-23 interleukin, it induces autoimmune inflammation and is responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.
Tag	C-His
Form	Liquid
Bio-activity	The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 for this effect is less or equal to 10 ng/mL.

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Molecular Mass	58.3 kDa
AA Sequence	IL12B (p40): MWELEKDVYVVEVDWTPDAPGETVNLTCDTPEEDDITWTSDQRHGVI GSGKTLTITVKEFLDAGQYTCHKGGETLSHSHLLLHKKENGIWSTEILKNFKNKTFLK CEAPNYSGRFTCSWLVQRNMDLKFNIKSSSSSPDSRAVTCGMASLSAEKVTLDQR DYEKYSVSCQEDVTCPTAEETLPIELALEARQQNKYENYSTSFFIRDIIKPDPPKNLQ MKPLKNSQVEVSWEYPDSWSTPHSYFSLKFFVRIQRKKEKMKETEEGCNQKGAFL VEKTSTEVQCKGGNVCVQAQDRYYNSSCSKWACVPCRVRS IL12A (p35): RVIPVSGPARCLSQSRNLLKTTDDMVKTAREKLKHYSCTAEDIDHEDIT RDQTSTLKTCLPLELHKNESCLATRETSSTTRGSCLPPQKTSLMMTLCLGSIYEDLK MYQTEFQAINAALQNHNHQQIILDKGMLVAIDELMQSLNHNGETLRQKPPVGEADPY RVKMKLCILLHAFSTRVVTINRVMGYLSSA
Endotoxin	< 1 EU/μg, determined by LAL method.
Purity	> 95% by SDS-PAGE
Applications	SDS-PAGE, Bioactivity
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.5 mg/mL (determined by Bradford assay)
Storage Buffer	Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol
Notes	For research use only. This product is not intended or approved for human, diagnostics or veterinary use.
GeneID 2	16159

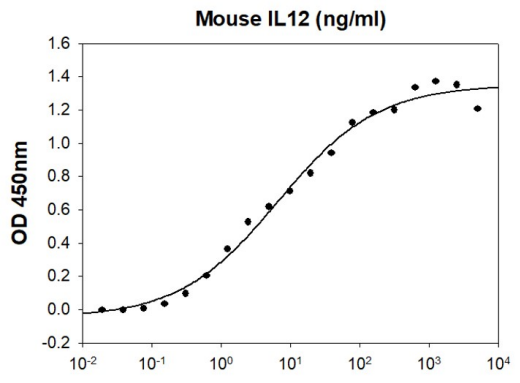
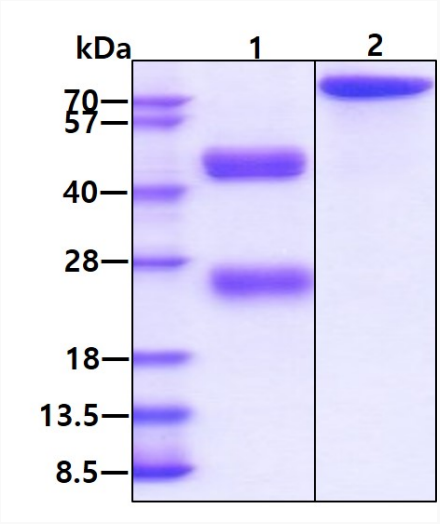
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References	1. Zhang X., et al, (2015) J Immunol. 195:1665-1675. 2. Zamani A., et al, (2017) Immune Netw. 17:186-191.

GENE INFORMATION

Gene Name	Il12b interleukin 12b [Mus musculus (house mouse)]
Official Symbol	IL12B
Synonyms	IL12B; interleukin 12b; interleukin-12 subunit beta; CLMF p40; IL-12 p40; IL-12 subunit p40; IL-23 subunit p40; cytotoxic lymphocyte maturation factor 40 kDa subunit; p40; Il-12b; Il12p40; Il-12p40;
Gene ID	16160
mRNA Refseq	NM_001303244
Protein Refseq	NP_001290173
UniProt ID	P43432
Gene Name 2	Il12a interleukin 12a [Mus musculus (house mouse)]
Official Symbol 2	IL12A
Synonyms 2	IL12A; interleukin 12a; interleukin-12 subunit alpha; CLMF p35; IL-12 subunit p35; interleukin 12a p35 subunit; cytotoxic lymphocyte maturation factor 35 kDa subunit; p35; Il12a; Il-12a; IL-12p35; MGC151228; MGC151232;
mRNA Refseq 2	NM_008351

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Protein Refseq 2	NP_032377
UniProt ID 2	P43431
Biological Activity	 Mouse IL12 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range is less or equal to 10 ng/mL.
SDS-PAGE	 3 μg by SDS-PAGE visualized by coomassie blue stain.

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Lane 1: reducing condition
Lane 2: non-reducing condition

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