

Active Recombinant Human IL12B protein, His-tagged

Cat. No. IL12B-2290H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human IL12B protein(P29460)(30~320 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	30-320 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Interleukin 12B (IL12B)encodes a subunit of interleukin 12, a cytokine that acts on T and natural killer cells, and has a broad array of biological activities.Interleukin 12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor like subunit encoded by this gene, and a 35 kD subunit encoded by IL12A. This cytokine is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. Interleukin 12B can combind with Interleukin 12 Receptor Beta 1 (IL12Rb1). Thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL12B and recombinant human IL12Rb1. Briefly, biotin-linked recombinant human IL12B were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl then transferred to IL12Rb1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST 3 times and incubation with HRP conjugage for 30min, then wells were aspirated and washed 5 times. With the

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addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of IL12B and IL12Rb1 was shown, and this effect was in a dose dependent manner.

Molecular Mass 36.6kDa

Endotoxin <1.0EU per 1µg (determined by the LAL method).

Purity > 95% as determined by SDS-PAGE.

Storage Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

Reconstitution Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name IL12B interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) [Homo sapiens]

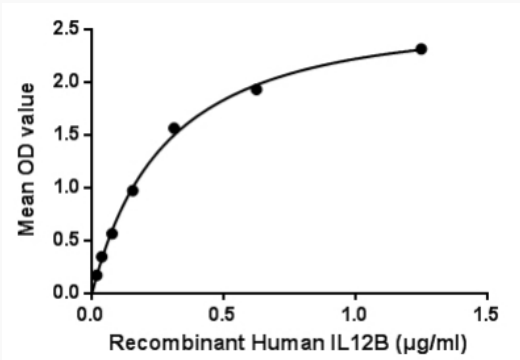
Official Symbol IL12B

Synonyms IL12B; interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40); NKSF2; interleukin-12 subunit beta; CLMF; CLMF2; cytotoxic lymphocyte maturation factor 2; p40; IL 12B; IL12; subunit p40; interleukin 12; interleukin 12 beta chain; natural killer cell stimulatory factor; 40 kD subunit; natural killer cell stimulatory factor 2; NKSF; CLMF p40; IL-12 subunit p40; IL12, subunit p40; interleukin 12, p40; interleukin-12 beta chain; NK cell stimulatory factor chain 2; cytotoxic lymphocyte maturation factor 40 kDa subunit; natural killer cell stimulatory factor, 40 kD subunit; IL-12B;

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Gene ID	3593																		
mRNA Refseq	NM_002187																		
Protein Refseq	NP_002178																		
MIM	161561																		
UniProt ID	P29460																		
Activity	 <table border="1"> <caption>Approximate data points from ELISA activity graph</caption> <thead> <tr> <th>Recombinant Human IL12B (µg/ml)</th> <th>Mean OD value</th> </tr> </thead> <tbody> <tr><td>0.0</td><td>0.0</td></tr> <tr><td>0.05</td><td>0.2</td></tr> <tr><td>0.1</td><td>0.4</td></tr> <tr><td>0.2</td><td>0.8</td></tr> <tr><td>0.3</td><td>1.2</td></tr> <tr><td>0.4</td><td>1.5</td></tr> <tr><td>0.6</td><td>1.9</td></tr> <tr><td>1.25</td><td>2.3</td></tr> </tbody> </table>	Recombinant Human IL12B (µg/ml)	Mean OD value	0.0	0.0	0.05	0.2	0.1	0.4	0.2	0.8	0.3	1.2	0.4	1.5	0.6	1.9	1.25	2.3
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SDS-PAGE	