

## Recombinant Human IL12B protein, Fc-tagged

**Cat. No.** IL12B-310H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human IL12B (Ile23-Ser328) protein was fused to human IgG1 Fc tag at C-terminus and expressed in human 293 cells (HEK293).
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	Ile23-Ser328
<b>Description</b>	<p>Interleukin-12 (IL12) is also known as natural killer cell stimulatory factor (NKSF), cytotoxic lymphocyte maturation factor (CLMF), is a heterodimeric cytokine encoded by two separate genes, IL-12A (p35) and IL-12B (p40). IL12 is naturally produced by dendritic cells, macrophages and human B-lymphoblastoid cells (NC-37) in response to antigenic stimulation. IL-12 is involved in the differentiation of naive T cells into Th0 cells and plays an important role in the activities of natural killer cells and T lymphocytes. IL-12 also has anti-angiogenic activity, which means it can block the formation of new blood vessels.</p> <p>Interleukin-12 subunit beta (IL12B) also known as NKSF2, CLMF2 and P40. Interleukin-12 subunit beta has been shown to interact with IL23. A large excess of monomeric IL12B is also secreted by the cells producing IL12, and exhibits no demonstrable biological activity. Overexpression of IL12B gene has been shown to be associated with the pathogenesis of multiple sclerosis. In addition, studies have revealed that the promoter polymorphism of this gene is implicated in the severity of atopic and non-atopic asthma in children.</p>

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<b>Predicted N Terminal</b>	Ile23
<b>Form</b>	Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
<b>Molecular Mass</b>	The protein has a calculated MW of 61.3 kDa. The protein migrates as 70-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
<b>Endotoxin</b>	Less than 1.0 EU per µg by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	IL12B
<b>Official Symbol</b>	IL12B
<b>Synonyms</b>	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

**Gene ID** 3593

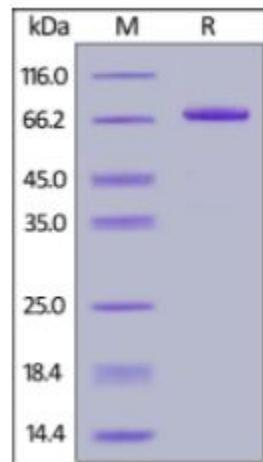
**mRNA Refseq** NM\_002187

**Protein Refseq** NP\_002178

**MIM** 161561

**UniProt ID** P29460

**SDS-PAGE of IL12B-310H**



Human IL-12B, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than

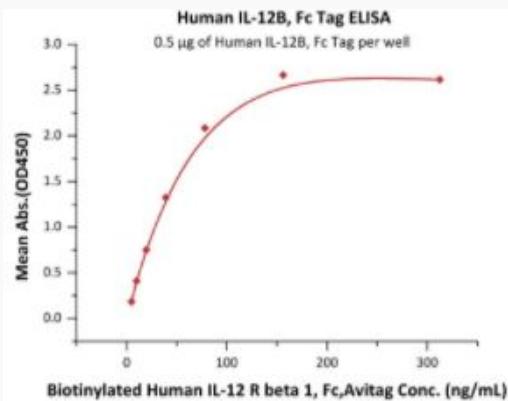
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95%.

### Bioactivity-ELISA of IL12B-310H



Immobilized Human IL-12B, Fc Tag at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-12 R beta 1, Fc,Avitag with a linear range of 5-40 ng/mL (QC tested).

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