Recombinant Human Interleukin 12B, Fc-Tagged

Cat. No. IL12B-35H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Interleukin 12B, Fc-Tagged expressed in E.coli is a disulfide-linked homodimer. The reduced monomer consists of 544 amino acids and has a predicted molecular mass of 61.4 kDa. As a result of glycosylation, the rhIL12B/Fc monomer migrates as an approximately 70-80 kDa band in SDS-PAGE under reducing conditions.
Species	Human
Source	E.coli
Description	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. This cytokine 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. Overexpression of this gene was observed in the central nervous system of patients with multiple sclerosis (MS), suggesting a role of this cytokine in the pathogenesis of the disease. A DNA sequence encoding the p40 subunit of human IL12, termed asIL12B (NP_002178.2) (Met 1- Ser 328) was fused with the Fc region ofhuman IgG1 at the C-terminus.
Predicted N terminal	Ile 23

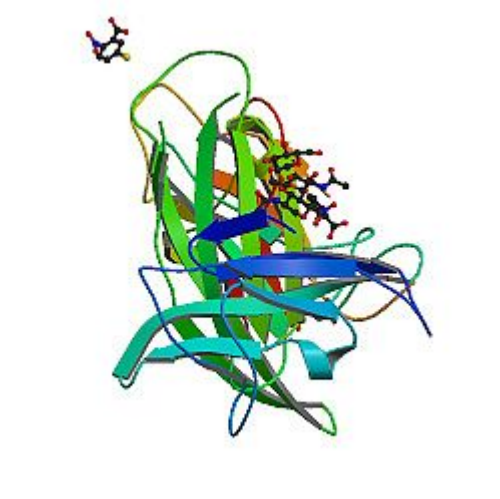
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Purity	> 95%, as determined by SDS-PAGE
Endotoxin	1.0 EU per 1μg cytokine as determined by the LAL method.
Formulation	Supplied as a 0.2μm filtered solution of 100mM Glycine, 10mM NaCl, 50 mM Tris, pH 7.5
Reconstitution	Follow the instructions on the vial. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Stability	Samples are stable for up to twelve months from date of receipt -70°C
Storage	Store it under sterile conditions at -70℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Unitprot ID	P29460

GENE INFORMATION

Gene Name	IL12B interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)
Synonyms	OTTHUMP00000160820; CLMF; CLMF2; IL-12B; NKSF; NKSF2; CLMF p40; Cytotoxic lymphocyte maturation factor 40 kDa subunit; IL-12 subunit p40; IL12, subunit p40; NK cell stimulatory factor chain 2; cytotoxic lymphocyte maturation factor 2, p40; interleukin 12, p40; interleukin 12B; interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic; interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40); IL12B
Gene ID	3593
mRNA Refseq	NM_002187

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Protein Refseq	NP_002178
MIM	161561
Chromosome Location	5q31.1-q33.1
Pathway	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Toll-like receptor signaling pathway; Type I diabetes mellitus
Function	contributes_to cytokine activity; hematopoietin/interferon-class (D200-domain) cytokine receptor activity; interleukin-12 alpha subunit binding; interleukin-12 receptor binding; protein binding; protein heterodimerization activity; protein homodimerization activity; signal transducer activity
PDBrendering based on 1f42.Available structures:1f42,1f45	

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