

# Recombinant Human IL23 (IL12B & IL23A Heterodimer), His-tagged

Cat. No. IL23A&IL12B-209H Lot. No. (See product label)

## SPECIFICATION

**Product Overview** A DNA sequence encoding the human IL23 complex composed of IL12B (NP\_002178.2)(Met1-Ser328) and the mature form of human IL23A (NP\_057668.1) (Arg20-Pro189) linked by a polypeptide linker was fused with a polyhistidine tag at the C-terminus.

**Species** Human


**Source** Human Cells

**ProteinLength** 1-328;20-189 a.a.

**Description** This gene 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. 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. The promoter polymorphism of this gene has been reported to be associated with the severity of atopic and non-atopic asthma in children

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<b>Predicted N Terminal</b>	Ile 23
<b>Form</b>	Lyophilized from sterile PBS, pH 7.4.
<b>Molecular Mass</b>	The recombinant human IL23(IL23A&IL12B) consists 502 amino acids and predicts a molecular mass of 55.8 kDa.
<b>Endotoxin</b>	<1.0 EU per µg protein as determined by the LAL method.
<b>Purity</b>	> 90 % as determined by SDS-PAGE
<b>Stability</b>	Samples are stable for up to twelve months from date of receipt at -70°C
<b>Storage</b>	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Reconstitution</b>	A hardcopy of COA with reconstitution instruction is sent along with the products.
<b>Shipping</b>	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

## GENE INFORMATION

<b>Gene Name</b>	IL12B interleukin 12B [ Homo sapiens (human) ]
<b>Official Symbol</b>	IL12B
<b>Synonyms</b>	OTTHUMP00000160820; CLMF; CLMF2; IL-12B; NKSF; NKSF2; CLMF p40; Cytotoxic lymphocyte maturation factor 40 kDa subunit; IL-12 subunit p40; IL12,

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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](#)

**Protein Refseq** [NP\\_002178](#)

**MIM** [161561](#)

**UniProt ID** [P29460](#)

**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; cytokine receptor activity; interleukin-12 alpha subunit binding

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