

Active Recombinant Human IL23A protein, His & Avi-tagged, Biotinylated

Cat. No. IL23A-1823H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Human IL-23 alpha & IL-12 beta Heterodimer is expressed from human 293 cells (HEK293). It contains AA Arg 20 - Pro 189 (IL23A) & Ile 23 - Ser 328 (IL12B) (Accession # NP_057668 (IL23A) & AAH67499 (IL12B)). Biotinylation of this product is performed using Avitag technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin. The biotin to protein ratio is 0.4-1 as determined by the HABA assay.
Species	Human
Source	HEK293
ProteinLength	AA Arg 20 - Pro 189 (IL23A) & Ile 23 - Ser 328 (IL12B)
Description	Interleukin-23 subunit alpha (IL-23 alpha) can associates with IL12B to form the IL-23 interleukin, a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to a heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.
Predicted N Terminal	His (IL23A) & Ile 23 (IL12B)

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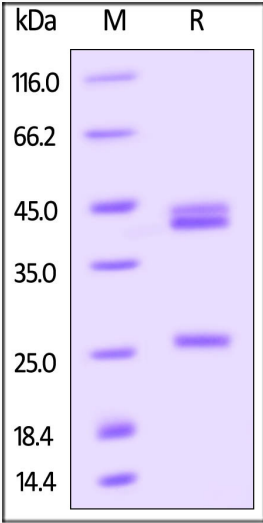
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4, 10% trehalose.
Bio-activity	Immobilized Anti-p40 subunit of IL23Anti-IL12B MAb, Human IgG1 at 2 µg/mL (100 µL/well) can bind Biotinylated Human IL23A & IL12B, His Tag with a linear range of 4.9-39 ng/mL. Immobilized Anti-p19 subunit of IL23 Anti-IL23A MAb, Human IgG1 at 2 µg/mL (100 µL/well) can bind Biotinylated Human IL23A & IL12B, His Tag with a linear range of 1.2-19.5 ng/mL.
Molecular Mass	Biotinylated Human IL23A & IL12B Heterodimer Protein, produced by co-expression of IL23A and IL12B, has a calculated MW of 21.9 kDa (IL23A) & 34.7 kDa (IL12B). Subunit IL23A is fused with a polyhistidine tag at the N-terminus and subunit IL12B contains no tag. The protein has a calculated MW of 21.9 kDa (IL23A) & 34.7 kDa (IL12B). The protein migrates as 26 kDa (IL23A) & 40-45 kDa (IL12B) under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per µg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20°C or lower. Please avoid repeated freeze-thaw cycles. No activity loss is observed after storage at: 4-8°C for 12 months in lyophilized state; -70°C for 3 months under sterile conditions after reconstitution.
Reconstitution	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.
Conjugation	Biotin

GENE INFORMATION

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Gene Name	IL23A interleukin 23 subunit alpha [Homo sapiens (human)]
Official Symbol	IL23A
Synonyms	P19; SGRF; IL-23; IL-23A; IL23P19; IL-23 subunit alpha; IL-23-A; IL-23p19; JKA3 induced upon T-cell activation; interleukin 23 p19 subunit; interleukin 23, alpha subunit p19; interleukin-23 subunit p19; interleukin-six, G-CSF related factor
Gene ID	51561
mRNA Refseq	NM_016584.2
Protein Refseq	NP_057668.1
UniProt ID	Q9NPF7
SDS-PAGE	 Biotinylated Human IL-23 alpha & IL-12 beta Heterodimer on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The

purity of the protein is greater than 95%.

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