Recombinant Human IL12A & IL27B Heterotrimer Protein (Met1-Ser219 & Met1-Lys229), His-Flag-tagged

Cat. No. IL35-1039H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL12A & IL27B Heterotrimer Protein (NP_000873.2)(Met1-Ser219) & (NP_005746.2)(Met1-Lys229) was produced by HEK293 Cells expression system. The IL12A protein was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The IL27B protein was fused with a flag tag at the C-terminus, constructed the plasmid 1. The two plasmids were co-expressed and the human IL27B&IL12A heterodimer was purified.
Species	Human
Source	HEK293
ProteinLength	Met1-Ser219 & Met1-Lys229
Description	IL12A is a subunit of a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. IL12A, together with IL27B, form a disulfide-linked heterodimer: IL12A&IL27B. IL12A&IL27B is required for the T-cell-independent induction of IFN-gamma, and is important for the differentiation of both Th1 and Th2 cells. The responses of lymphocytes to this cytokine are mediated by the activator of transcription protein STAT4. Nitric oxide synthase 2A (NOS2A/NOS2) is found to be required for the signaling process of IL12A&IL27B in innate immunity.
Predicted N Terminal	Arg 21 & Arg 23
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant heterodimer of human IL27B&IL12A comprises 425 (217+208) amino acids and has a calculated molecular mass of 48.3(24.3+24) KDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 85 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Shipping	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

Gene Name	IL12A interleukin 12A [Homo sapiens (human)] & EBI3 Epstein-Barr virus induced 3 [Homo sapiens (human)]
Official Symbol	IL12A & IL27B
Synonyms	P35; CLMF; NFSK; NKSF1; IL-12A & IL27B; IL35B; IL-27B

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Gene ID	3592 & 10148
mRNA Refseq	NM_000882 & NM_005755
Protein Refseq	NP_000873 & NP_005746
UniProt ID	P29459 & Q14213

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