

Recombinant Human Epstein-Barr virus induced 3 Protein and interleukin 27 Protein, Flag tagged

Cat. No. EBI3-250H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human IL-27 EBI-3 protein (Q14213) (Arg 21-Lys 229) linked human IL-27 P28 protein (Q8NEV9) (Phe 29-Pro 243) with a Flag tag at the C-terminus was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	EBI3: 21-229aa IL27: 29-243aa
Description	Interleukin 27 (IL-27) is a member of the IL-12 cytokine family. It is a heterodimeric cytokine that is encoded by two distinct genes, Epstein-Barr virus-induced gene 3 (EBI3) and IL-27p28. IL-27 is expressed by antigen presenting cells and interacts with a specific cell-surface receptor complex known as IL-27 receptor (IL-27R). This receptor consists of two proteins, IL-27Ra and gp130. IL-27 induces differentiation of the diverse populations of T cells in the immune system and also upregulates IL-10. When IL-27 binds to the IL-27 receptor, signaling pathways including JAK-STAT and p38 MAPK pathways are turned on.[6][2] There are two types of responses, pro-inflammatory and anti-inflammatory, which involve different types of cells, such as macrophages, dendritic cells, T cells, and B cells. The response that is activated is very much dependent on the external surrounding of IL-27. There are many different subsets of T cells, such as Th1, Th2, Th17, Tr1,

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and Treg cells; IL-27 is greatly involved in differentiation through inducing or suppressing of each T cell subset. Th1 cells, which express IFN γ , are generated by IL-27 through STAT1 dimerization and nuclear localization which subsequently leads to the expression of T-bet and signature Th1 genes. Th2 cells, which express IL-4, are inhibited by IL-27 through the transcription factor GATA-3. Th17 cells, which express IL-17, IL-22, and granulocyte macrophage colony-stimulating factor (GM-CSF), are inhibited by IL-27 through STAT1 and expression of transcription factor ROR γ t. Tr1 cells, which express IL-10, are induced by IL-27 through the transcription factor c-Maf. Treg cells are inhibited by IL-27 through STAT1 and STAT3.

Tag	C-Flag
Molecular Mass	49.4 kDa
Endotoxin	Less than 1.0 EU/ μ g by the LAL method.
Purity	>90% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μ m filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μ g/mL in sterile water.
GenelD 2	246778

GENE INFORMATION

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Gene Name	EBI3 Epstein-Barr virus induced 3 [Homo sapiens (human)]
Official Symbol	EBI3
Synonyms	EBI3; Epstein-Barr virus induced 3; IL27B; IL35B; IL-27B; interleukin-27 subunit beta; EBV-induced gene 3 protein; Epstein-Barr virus induced gene 3; IL-27 subunit beta; IL27 subunit; IL35 subunit; cytokine receptor; epstein-Barr virus-induced gene 3 protein
Gene ID	10148
mRNA Refseq	NM_005755
Protein Refseq	NP_005746
MIM	605816
UniProt ID	Q14213
Gene Name 2	IL27 interleukin 27 [Homo sapiens (human)]
Official Symbol 2	IL27
Synonyms 2	IL27; interleukin 27; p28; IL30; IL-27; IL27A; IL-27A; IL27p28; interleukin-27 subunit alpha; IL-27 p28 subunit; IL-27 subunit alpha; IL-27-A; IL27-A; interleukin-30
mRNA Refseq 2	NM_145659
Protein Refseq 2	NP_663634
MIM 2	608273

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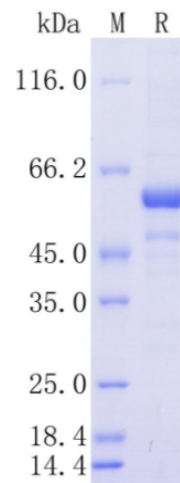
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UniProt ID 2

Q8NEV9

**Protein on SDS-
PAGE under
reducing (R)
condition.**



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