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IL 27 Human

Interleukin-27 Human Recombinant
CYK0305

Product Overview

Name	IL 27 Human
Description	
Interleukin-27 Human Recombinant	
Accession (Primary)	Q8NEV9
Synonyms	
Interleukin-30, IL-30, IL-27/p28, p28, Interleukin-27, Interleukin-27/p28, IL-27, Interleukin-27 subunit alpha, IL-27 subunit alpha, IL27-A, Il27, Il27a, IL-27p28.	
Introduction	
Interleukin-27 protein is related to IL-12A & is one of the subunits of a heterodimeric cytokine complex. IL-27 interacts with EBV induced gene 3 also called EBI3, and forms a complex that drives rapid expansion of CD4 (+) T cells. IL-27 complex is synergizes with IL-12 in order to trigger the cytokine production of IFN-Gamma of CD4 (+) T cells. The biological effect of IL-27 is mediated by class-I cytokine receptor (WSX1/TCRR). The pro-inflammatory activity of IL-27 is mediated through the growing expression of key molecules involved in the MHC class-I & MHC class-II pathways. Both MHC class-I and MHC-class-II expression are increased in endothelial cells after Interleukin-27 stimulation which suggests that it may play an important role in conferring the immune function on vascular endothelium IL-27p28 subunit can be induced by IFN-beta and during LPS-induced maturation of dendritic cells in type-I IFN-dependent manner through IFN regulatory factor-1 activation. Interleukin-27 regulates Interleukin-12 responsiveness of CD4+ T cells through Stat1-dependent and -independent mechanisms. IL-17 & IL-23 play an important IL-17 role in inflammation. Interleukin-27 possesses potent anti-angiogenic activity that plays an important role in its antitumor and antimetastatic activities. EBV induced gene 3 plays a role, independently from IL-27, in regulating anti-viral or anti-tumoral immune responses. Interleukin-27 is a potent inhibitor of HIV-1 replication in macrophages, CD4+ T cells, peripheral blood mononuclear cells. Interleukin-27 triggers STAT activation and gene transcription.	
Source	
HEK.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The IL-27 was lyophilized from 1mg/ml in 1xPBS.	

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Stability

Lyophilized IL-27 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL27 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 90% as obsereved by SDS-PAGE.

Amino acid sequence

IL-27A (215aa): FPRPPGRPQL SLQELRREFT VSLHLARKLL AEVRGQAHRF AESHLPGVNL YLLPLGEQLP DVSLTFQAWR RLSDPERLCF ISTTLQPFHA LLGGLGTQGR WTNMERMQLW AMRLDLRDLQ RHLRFQVLAA GFNLPEEEEE EEEEEEEERK GLLPGALGSA LQGPAQVSWP QLLSTYRLLH SLELVLSRAV RELLLLSKAG HSVWPLGFPT LSPQP. IL-27B (209aa): RKGPPAALTL PRVQCRASRY PIAVDCSWTL PPAPNSTSPV SFIATYRLGM AARGHSWPCL QQTPTSTSCT ITDVQLFSMA PYVLNVTAVH PWGSSSSFVP FITEHIIKPD PPEGVRLSPL AERQLQVQWE PPGSWPFPEI FSLKYWIRYK RQGAARFHRV GPIEATSFIL RAVRPRARYY VQVAAQDLTD YGELSDWSLP ATATMSLGK.

Biological Activity

The specific activity was determined by the dose dependent inhibition of HIV replication in human CD4+ T cells and in human monocyte-derived macrophages and is typically 4-12ng/ml.

Solubility

It is recommended to reconstitute the lyophilized IL-27 in sterile PBS containing 0.1% endotoxin-free recombinant HSA.

Precautions

IL 27 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q8NEV9)