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IL 27 Mouse

Interleukin-27 Mouse Recombinant
CYK0306

Product Overview

Name	IL 27 Mouse
Description	
Interleukin-27 Mouse Recombinant	
Accession (Primary)	Q8K3I6
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	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from 10mM $NaHCO_3$ buffer pH-8.5.	

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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. Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

MFPTDPLSLQ ELRREFTVSL YLARKLLSEV QGYVHSFAES RLPGVNLDLL PLGYHLPNVS LTFQAWHHLS DSERLCFLAT TLRPFPAMLG GLGTQGTWTS SEREQLWAMR LDLRDLHRHL RFQVLAAGFK CSKEEEDKEE EEEEEEEKK LPLGALGGPN QVSSQVSWPQ LLYTYQLLHS LELVLSRAVR DLLLLSLPRR PGSAWDS.

Biological Activity

Mouse p28 biological activity was measured via dose-dependent inhibition of TGF-beta and IL-6-induced IL-17A expression in mouse CD4 splenocytes. 50ng/ml of mouse p28 is capable of inhibiting >25% of IL-17A expression in this assay.

Solubility

It is recommended to reconstitute the lyophilized IL-27 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

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

Target Information: (Q8K3I6)