

## Animal-Free IL-30/IL-27A Protein, Human (His)

<b>Cat. No.:</b>	HY-P700122AF
<b>Synonyms:</b>	Interleukin-27 subunit beta; IL-27B; Ebi3; Interleukin-27 subunit alpha; IL-27A; p28
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Accession:</b>	Q8NEV9 (F29-P243)
<b>Gene ID:</b>	246778
<b>Molecular Weight:</b>	Approximately 25.47 kDa

### PROPERTIES

<b>AA Sequence</b>	<pre> M F P R P P G R P Q   L S L Q E L R R E F   T V S L H L A R K L   L S E V R G Q A H R F A E S H L P G V N   L Y L L P L G E Q L   P D V S L T F Q A W   R R L S D P E R L C F I S T T L Q P F H   A L L G G L G T Q G   R W T N M E R M Q L   W A M R L D L R D L Q R H L R F Q V L A   A G F N L P E E E E   E E E E E E E E E R   K G L L P G A L G S A L Q G P A Q V S W   P Q L L S T Y R L L   H S L E L V L S R A   V R E L L L L S K A G H S V W P L G F P   T L S P Q P </pre>
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a solution containing 1X PBS, pH 8.0.
<b>Endotoxin Level</b>	<0.1 EU per 1 µg of the protein by the LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	<p>The IL-30/IL-27A Protein collaborates with EB13 to form the IL-27 interleukin, a heterodimeric cytokine playing a pivotal role in innate immunity. Demonstrating both pro- and anti-inflammatory properties, IL-27 exerts multifaceted effects on immune function. It regulates T-helper cell development, inhibits T-cell proliferation, enhances cytotoxic T-cell activity, induces isotype switching in B-cells, and exerts diverse effects on innate immune cells. Among its target cells, CD4 T-helper cells differentiate into TH1, TH2, and TH17 cells under its influence. IL-27 prompts rapid clonal expansion of naive CD4 T-cells, synergizes with IL-12 for interferon-gamma production, and binds to the cytokine receptor WSX-1/TCCR for signal transduction. Potentiating the early phase of TH1 response, IL-27 suppresses TH2 and TH17 differentiation, impacting</p>
-------------------	---

---

GATA3 expression and promoting TBX21/T-Bet activation via STAT1. In CD8 T-cells, it activates STATs and GZMB. Notably, IL-27 inhibits TH17 cell development and IL-17 production, suppressing pro-inflammatory cytokines, activating suppressors of cytokine signaling, and antagonizing the effects of cytokines like IL6. Beyond its immunomodulatory functions, IL-27 exhibits antitumor and antiangiogenic activities, inducing the production of antiangiogenic chemokines in endothelial cells and displaying antiviral properties by inhibiting HIV-1 replication. The heterodimeric structure of IL-27, formed with EB13, is crucial for its functions and is known as interleukin IL-27.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA