

别名(synonym): Human IL27; IL-27; IL27; IL-27 subunit alpha; IL27A; IL-27-A; IL27-A; IL27p28; interleukin 27

来源(Source): Human embryonic kidney cell, HEK293-derived human IL-27 protein

蛋白结构 (Structure):

该蛋白不含标签

基因 ID: Q14213.2 (IL-27EBI3) & AAM34498 (IL-27p28)

氨基酸序列

IL-27 EBI-3(Arg21-Lys229),IL-27p28(Phe29-Pro243)

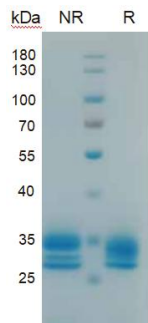
分子量大小(MW)

56.0 kDa (Monomer)

纯度 (Purity)

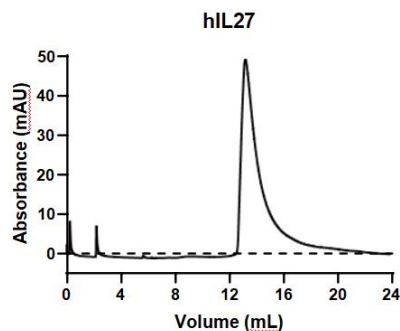
> 95%, determined by SDS-PAGE

SDS-PAGE



4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

Gel-filtration



Size-exclusion chromatography of recombinant human IL27 protein (280 nm absorbance)

内毒素含量 (Endotoxin)

<0.010 EU per 1 ug of the protein by the LAL method

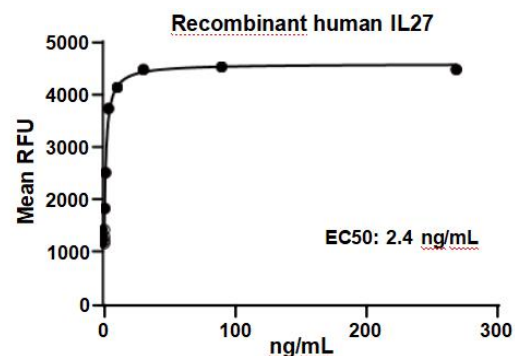
制剂(Formulation)

Solution protein.

Dissolved in sterile PBS buffer.

This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.

活性检测 (Biological Activity)



Recombinant human IL27 anti-viral activity using HepG2 human hepatocellular carcinoma cells infected with encephalomyocarditis (EMC) virus.

储存与运输(Storage)

Avoid repeated freeze-thaw cycles.

It is recommended that the protein be aliquoted for optimal storage.

36 months from date of receipt, -20 to -70 ° C as supplied.

产品背景介绍 (Production)

Interleukin-27 (IL-27) is a heterodimeric group 2 receptor ligand molecule that belongs to the IL-6/IL-12 family of long type I cytokines. It is composed of EBI3 (EBV-induced gene 3), a 34 kDa glycoprotein that is related to the p40 subunit of IL-12 and IL-23, and p28, the 28 kDa glycoprotein that is related to the p35 chain of IL-12. The human EBI3 gene encodes a 229 amino acid (aa) precursor that contains a 20 aa signal peptide and 209 aa mature

protein. The mature region contains two potential N-linked glycosylation sites, two fibronectin type III domains, and two pairs of conserved cysteine residues with a WSXWS-like motif that places the molecule in the hematopoietin receptor family. Although p40, the EBI3 counterpart in IL-12, is known to form homodimers, there is no evidence to date that EBI3 also homodimerizes. Human EBI3 is 61% aa identical to mouse EBI3. The human p28 gene encodes a 243 aa precursor that contains a 28 aa signal sequence and 215 aa mature region. The mature region is characterized by the presence of four alpha -helices, placing it in the IL-6 family of helical cytokines. Human p28 is 74% aa identical to mouse p28. IL-27 is expressed by monocytes, endothelial cells and dendritic cells. IL-27 binds to and signals through a heterodimeric receptor complex composed of WSX-1 (TCCR) and gp130. Evidence suggests IL-27 interacts only with WSX-1. IL-27 has both anti- and proinflammatory properties. As an anti-inflammatory, IL-27 seems to induce a general negative feedback program that limits T and NK-T cell activity. At the onset of infection, IL-27 induces an IL-12 receptor on CD4⁺ T cells, making them susceptible to subsequent IL-12 activity (and possible Th1 development).

