



## Interleukin-28A, HEK, human recombinant (rHuIL-28A-HEK)

**Catalog No:** 97504  
**Lot No:** XXXXX  
**Source:** HEK293  
**Synonyms:** Interleukin-28A, IL-28A, IFN-Lambda 2, Interferon-Lambda 2, Cytokine ZCYTO20, IL28A, IFNL2, ZCYTO20

### Background

IL-28A is distantly related to type I interferons and the IL-10 family. Expression of IL-28A is induced by viral infection which interacts with a heterodimeric class II cytokine receptor that consists of interleukin 10 receptor, beta (IL10RB) and interleukin 28 receptor, alpha. IL-28A exhibits common features with type I IFNs such as antiviral activity, antiproliferative activity and in vivo antitumour activity. IL-28A acts similarly to IFNs, but is less effective generally and has activity in a more limited range of cell lines. IFN-ambda 1, IFN-lambda 2 and IFN-lambda 3 are closely positioned genes on human chromosome 19. IL-28A induces ELR(-) CXC chemokine mRNA in human peripheral blood mononuclear cells, in an IFN-gamma-independent manner. IL-28A is able to generate tolerogenic DCs, an activity that could thwart IFN-beta functions. IL-28A produced in response to viral infection, activates both monocytes and macrophages producing a restricted panel of cytokines and therefore is an important factor in activating innate immune responses at the site of viral infection.

### Description

Interleukin-28A human recombinant produced in HEK cells is a non-glycosylated monomer, having a total molecular weight of 24 kDa. IL28A is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

IL28A was lyophilized from 1 mg/ml in 1xPBS.

### Solubility

It is recommended to reconstitute the lyophilized Interleukin-28A in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized IL-28A, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL28A 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 95% as observed by SDS-PAGE.

### Activity

The specific activity was determined by the dose dependent protection of the cytopathic effect on A549 cells (human lung adenocarcinoma epithelial cell line) that were challenged with encephalomyocarditis (EMC) virus and is typically 0.5 - 5 ng/ml.

### Usage

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