Catalog # IL9-H4228



#### Synonym

IL29,IFNL1,IFNλ1,Interleukin-29,IFN lambda 1

## Source

Human IL-29, His Tag(IL9-H4228) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Thr 200 (Accession # <u>NP\_742152.1</u>). Predicted N-terminus: Gly 20

# **Molecular Characterization**

IL-29(Gly 20 - Thr 200) Poly-his NP 742152.1

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 21.1 kDa. The protein migrates as 27-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

# Purity

>95% as determined by SDS-PAGE.

#### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

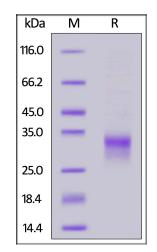
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- $70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human IL-29, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## Background

Interleukin-29, is a secreted protein which belongs to the IL-28 / IL-29 family, and is a type III interferon. It is also known as cytokine Zcyto21, Interferon lambda-1, IFN-lambda-1, IFN $\lambda$ 1, IL-29 and IFNL1, and is highly similar in amino acid sequence to the IL-28, the other type III interferon. IL28A, IL28B, and IL29, also named interferon $\lambda$ 2 (IFN $\lambda$ 2), IFN $\lambda$ 3, and IFN $\lambda$ 1, respectively, are classII cytokine receptor ligands that are distantly related to members of the IL 10 family (11-13% aa sequence identity) and the type I IFN family (15-19% aa sequence identity). Human IL29 cDNA encodes a 200 amino acid (aa) residue precursor protein with a







putative 19 aa signal peptide and a 181 aa mature protein, which is a monomer in solution. It shares 67% and 69% aa sequence identity with human IL28A and IL28B, respectively. IL-29 plays an important role in host defenses against microbes and its gene is highly upregulated in cells infected with viruses and also may play a role in antiviral immunity. Interleukin-29 / IL-29 up-regulates MHC class I antigen expression. It is a Ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IL28RA. The ligand/receptor complex seems to signal through the Jak-STAT pathway.



>>> www.acrobiosystems.com

4/21/2025