

Human IL-29 / Interleukin-29 Protein (His Tag)



Sino Biological Inc.

Biological Solution Specialist

Catalog Number: 12339-H08H

General Information

Gene Name Synonym:

IFNL1, IL-29

Protein Construction:

A DNA sequence encoding the human IL29 (NP_742152.1) (Met 1-Thr 200) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio-Activity

Measured in antiviral assays using HepG2 cells infected with vesicular stomatitisvirus (VSV).
The ED50 for this effect is typically 4-20 ng/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gly 20

Molecular Mass:

The recombinant human IL29 consists of 192 amino acids and has a predicted molecular mass of 21.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh IL29 is approximately 30-35 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

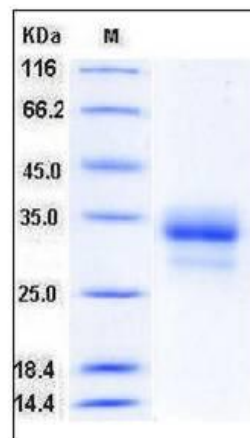
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Interleukin-29, also known as cytokine Zcyto21, Interferon lambda-1, IFN-lambda-1, IL-29 and IFNL1, is a secreted protein which belongs to the IL-28 / IL-29 family. Cytokines play a critical role in modulating the innate and adaptive immune systems. Interleukin-29 / IL-29 is a cytokine with immunomodulatory activity. Interleukin-29 / IL-29 is highly similar in amino acid sequence to the IL-28. IL-28 and IL-29 are induced by viral infection and showed antiviral activity. IL-28 and IL-29 interacted with a heterodimeric class II cytokine receptor that consisted of IL-10 receptor beta (IL-10Rbeta) and an orphan class II receptor chain, designated IL-28Ralpha. Interleukin-29 / IL-29 plays an important role in host defenses against microbes and its gene is highly upregulated in cells infected with viruses. Interleukin-29 / IL-29 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.

References

1. Sheppard P., et al., 2003, Nat. Immunol. 4:63-68.
2. Kotenko S.V., et al., 2003, Nat. Immunol. 4:69-77.
3. Vilcek J et al., 2003, Nat. Immunol. 4 (1): 8-9.

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