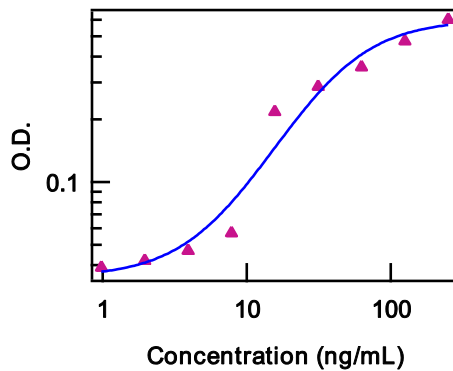


Human IL-28A (IFN lambda 2) Recombinant Protein

Catalog Number: 14-8289

Also known as: Interleukin-28A

RUO: For Research Use Only. Not for use in diagnostic procedures.



Inhibition of the cytopathic effect of EMC virus in HepG2 cells by Human IL-28A Recombinant Protein.

Product Information

Contents: Human IL-28A (IFN lambda 2) Recombinant Protein

REF **Catalog Number:** 14-8289

Concentration: 0.1 mg/mL

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: Insect expressed amino acids Val26-Val200 accession number NM_172138

Molecular Mass: 20.9 kDa

Purity: > 97% as determined by SDS-PAGE.

Endotoxin: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: The ED50 of this protein, as measured by inhibition of the cytopathic effect of EMC virus on HepG2 cells, is less than or equal to 10 ng/mL. This corresponds to a specific activity of greater than or equal to 1 x 10⁵ Units/mg.

Formulation: Sterile liquid: 0.1 M glycine, 1% BSA, pH 3.0



Temperature Limitation: Store at less than or equal to -70°C.



Batch Code: Refer to vial



Use By: Refer to vial

Description

IL-28A belongs to the IFN- λ family, a novel family of cytokines within the IL-10 superfamily. The three members of this family are IL-29 (IFN- λ 1), IL-28A (IFN- λ 2), and IL-28B (IFN- λ 3), and are also known as the type III Interferons.

The IFN- λ s signal through a heterodimeric receptor of which one subunit, IL-10R2, is shared with other members of the superfamily. The second subunit, IFN- λ R1 or IL-28R α , is unique to the IFN- λ s. Signaling occurs through the Jak/STAT pathway in a similar manner as the type I IFNs (IFN- α/β) and activates many of the same genes despite low sequence homology between the cytokines and receptors in the two families. Both IFN families display antiviral activity through the induction of antiviral protein production in target cells and the upregulation of MHC class I expression. These proteins also exhibit antiproliferative and antitumor effects, making them a possible alternative to IFN- α cancer therapies. Unlike the type I IFNs, which are able to stimulate most cells, response to IFN- λ stimulation appears to be limited to dendritic and some tumor cells due to the limited expression of IFN- λ R1. Another notable difference is the ability of the IFN- λ stimulation to drive dendritic cells towards the production of CD4+CD25+FoxP3+ regulatory T-cells, suggesting a possible immunoregulatory role.

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Also known as: Interleukin-28A

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Applications Reported

Human IL-28A Recombinant Protein is biologically active.

Applications Tested

The ED50 of this protein, as measured by inhibition of the cytopathic effect of EMC virus on HepG2 cells, is less than or equal to 10 ng/mL. This corresponds to a specific activity of greater than or equal to 1 x 10⁵ Units/mg.

References

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Related Products

14-8288 Human IL-28B (IFN lambda 3) Recombinant Protein

14-8299 Human IL-29 (IFN lambda 1) Recombinant Protein

88-7296 Human IL-29 (IFN lambda 1) ELISA Ready-SET-Go!®