

TECHNICAL DATA SHEET

Recombinant Human IL-29/IFN-lambda1 (Carrier-free)

Catalog Number: 21-8298

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-29/IFN-lambda1 (Carrier-free)

DESCRIPTION

The three members of this family, namely IFN-lambda1, -lambda2, and -lambda3 (also known as IL-29, IL-28A, and IL-28B) are part of the type III family of interferons. IL-29/IFN-λ1 interacts with the heterodimeric cytokine receptor composed of IL10R2 and IFNLR1, expressed on epithelial cells and hepatocytes. Signaling through this receptor system induces antiviral activity similar but distinct from the type I Interferons. The type III interferons have been reported to induce dendritic cell-mediated expansion of Foxp3+ regulatory T cells.

MOLECULAR MASS

Recombinant human IFN-λ 1 is a 19.8 kDa protein containing 178 amino acid residues.

AMINO ACID SEQUENCE

PTSKPTTTGK GCHIGRFKSL SPQELASFVK ARDALEESLK LKNWSCSSPV FPGNWDLRLL QVRERPVALE AELALTLKVL
 EAAAGPALED VLDQPLHLH HILSQLQACI QPQPTAGPRP RGRLLHHLHR LQEAPKKESA GCLEASVTFN LFRLLTRDLK
 YVADGNLCLR TSTHPEST

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

Determined by its ability to activate STAT phosphorylation in an ISRE Luciferase Reporter Assay using human colon carcinoma COLO205 cells. The expected ED₅₀ is 0.2-0.5 ng/ml.

RESEARCH AREAS

Diabetes / Weight Regulation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Kotenko SV, Gallagher G, Baurin VV, Lewis-Antes A, Shen M, Shah NK, Langer JA, Sheikh F, Dickensheets H and Donnelly RP. 2003. Nat Immunol. 4(1): 69-77. Sheppard P, Kindsvogel W, Xu W, Henderson K, Schlutsmeyer S, Whitmore TE, Kuestner R, Garrigues U, Birks C, Roraback J, Ostrand C, Dong D, Shin J, Presnell S, Fox B, Haldeman B, Cooper E, Taft D, Gilbert T, Grant FJ, Tackett M, Krivan W, McKnight G, Clegg C, Foster D and Klucher KM. 2003. Nat Immuno. 4(1): 63-68. Dolganiuc A, Kodys K, Marshall C, Saha B, Zhang S, Bala S and Szabo G. 2012. PLoS One. 7(10): e44915.

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