

TECHNICAL DATA SHEET

Recombinant Human IL-31 (Carrier-Free)

Catalog Number: 21-9130

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-31 (Carrier-Free)

DESCRIPTION

Human IL-31 is a T cell-derived cytokine that shares several structural and functional characteristics with IL-6, Oncostatin M, LIF, and Cardiotrophin-1. It signals through a receptor complex comprised of GPL (also known as gp130-like receptor or IL-31RA) and Oncostatin-M receptor (OSMR). GPL/OSMR signaling is a strong activator of STAT3 and STAT5, and can also activate STAT1, JAK1, and JAK2 signaling pathways. IL-31-regulated immune responses have been implicated in skin physiology and inflammatory skin diseases.

MOLECULAR MASS

Recombinant Human IL-31 is a 15.8 kDa protein containing 141 amino acid residues.

AMINO ACID SEQUENCE

SHTLPVRLLR PSDDVQKIVE ELQSLSKMLL KDVEEEKGVL VSQNYTLPLCL SPDAQPPNNI HSPAIRAYLK TIRQLDNKSV IDEIIEHLDK LIFQDAPETN ISVPTDTHC KRFILTISQQ FSECMDLALK SLTSGAQQAT T

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

Human

BIOACTIVITY

Measured by its ability to induce STAT3 activation in human U87 cells.

RESEARCH AREAS

Immune System, Inflammation

RECONSTITUTION

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

REFERENCES

Hänel, K.H. Control of the Physical and Antimicrobial Skin Barrier by an IL-31-IL-1 Signaling Network. 2016. The Journal of Immunology; 196(8):3233-44.

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