

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Interleukin-31 (rHu IL-31)

Catalog Number: PR1070

Source: Escherichia coli.

Quantity: 2µg/10µg/1.0mg

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 (GP130-like, IL-31RA) and OSMR (Oncostatin M receptor). 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 Weight:

Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 141 amino acids.

Purity:

>97% by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. Measured by its ability to induce STAT3 activation in U-87 MG human glioblastoma/astrocytoma cells. 5 ng/mL of rhIL31 can effectively induce STAT3 activation.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in PBS.

AA Sequence:

SHTLPVRLRLRPSDDVQKIVEELQSLSKM
LLKDVEEEKGVLVSQNYTLPCLSPDAQ

PPNNIHSPAIRAYLKTIRQLDNKSVIDEI
IEHLDKLIFQDAPETNISVPTDTHECKRF
ILTISQQFSECMDLALKSLTSGAQQATT

Endotoxin:

Less than 1EU/mg of rHuIL-31 as determined by LAL method.

Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.

Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

MADE IN CHINA

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