

## **IL-31**

Catalog # PVGS1065

## **Product Information**

Primary Accession Q6EBC2
Species Human

Sequence Ser24-Thr164

**Purity** > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

**Endotoxin Level** 

**Biological Activity** Fully biologically active when compared to standard. The specific activity is

determined by inducing STAT3 activation using human U-87 MG cells. 5.0

ng/ml of rHuIL-31 can effectively induce STAT3 activation.

**Expression System** E. coli

Theoretical Molecular Weight 15.8 kDa

**Formulation** Lyophilized from a 0.2 \( \text{Im filtered solution in PBS, pH 7.4.} \)

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a

concentration of 0.1-1.0 mg/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at -70°C or

-20°C. Upon reconstitution, the product should be stable for up to 1 week at

4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## **Additional Information**

**Gene ID** 386653

Other Names Interleukin-31, IL-31, IL31

**Target Background** 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.

## **Protein Information**

Name IL31

**Function** Activates STAT3 and possibly STAT1 and STAT5 through the IL31

heterodimeric receptor composed of IL31RA and OSMR (PubMed: 15184896). May function in skin immunity (PubMed: 15184896). Enhances myeloid progenitor cell survival in vitro (By similarity). Induces RETNLA and serum

amyloid A protein expression in macrophages (By similarity).

**Cellular Location** Secreted.

**Tissue Location** Detected at low levels in testis, bone marrow, skeletal muscle, kidney, colon,

thymus, small intestine and trachea

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.