# **Product Name: Recombinant Human IL-31**

Catalog #: PEH0921



#### **Summary**

Name IL-31

**Purity** Greater than 95% as determined by reducing SDS-PAGE

**Endotoxin level** <0.01 EU/μg as determined by LAL test.

Construction Recombinant Human Interleukin-31 is produced by our E.coli expression

system and the target gene encoding Ser24-Thr164 is expressed.

Accession # Q6EBC2

Host E.coli

Species Human

Predicted Molecular Mass 15.8 KDa

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Shipping The product is shipped at ambient temperature. Upon receipt, store it

immediately at the temperature listed below.

**Stability&Storage** Lyophilized protein should be stored at  $\leq$  -20°C, stable for one year after receipt.

Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at  $\leq$  -20°C for 3 months.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is

not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

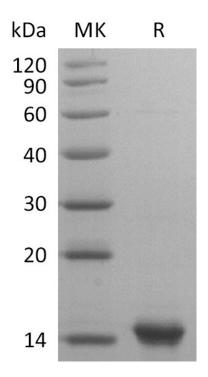
#### **SDS-PAGE** image

Web: https://www.enkilife.com E-mail: order@enkilife.com techsupport@enkilife.com Tel: 0086-27-87002838

### **Product Name: Recombinant Human IL-31**

Catalog #: PEH0921





#### **Alternative Names**

Interleukin-31; IL-31; IL31

## **Background**

Human Interleukin 31 (IL-31) is a cytokine containing a four-helix bundle structure. It shares several structural and functional characteristics with IL-6, Oncostatin M, LIF, and Cardiotrophin-1. Human IL-31 cDNA encodes a 164 amino acid precursor that contains a 23 amino acid signal peptide and a 141 amino acid mature protein. Human and mouse IL-31 share 24% sequence identity in the mature region. IL-31 is mainly associated with activated T cells and is preferentially expressed by type 2 helper T cells (Th2). IL-31 signals via a heterodimeric receptor complex composed of a gp130 related molecule termed IL-31RA (also GPL and GLMR) and an Oncostatin M receptor (OSM Rβ). The IL-31 receptor is constitutively expressed by keratinocytes and upregulated by IFNγ on monocytes. 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. Studies have shown that IL31 induces severe pruritis (itching) and dermatitis in transgenic mice.

#### Note

For Research Use Only, Not for Diagnostic Use.