

## Recombinant Human IL31 protein

Cat. No. IL31-641H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human IL31 protein was expressed in Escherichia coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	141
<b>Description</b>	Human IL-31 gene is located on Chr.12. It expresses the IL-31 protein at low levels in the type 2 helper T cells, which exists in testis, bone marrow, skeletal muscle, kidney, colon, thymus, small intestine and trachea. This protein shares several structural and functional characteristics with IL-6, Oncostatin M, LIF, and Cardiotrophin-1. IL-31 signals through IL-31 receptor A and oncostatin M receptor subunits and can activate STAT3 through receptors and maybe involve in skin immunity. It regulated immune responses have been implicated in skin physiology and inflammatory skin diseases. Human IL-31 shares 24 % a.a. sequence identity in the mature protein with mouse IL-31.
<b>Form</b>	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4.
<b>Bio-activity</b>	Fully biologically active when compared to standard. The specific activity is determined by inducing STAT3 activation using human U-87 MG cells. 5 ng/mL of rHuIL-31 can effectively induce STAT3 activation.
<b>Molecular Mass</b>	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 141

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	amino acids.
<b>AA Sequence</b>	SHTLPVRLLRPSDDVQKIVEELQSLSKMLLKDVVEEEKGVLVSQNYTLPCLSPDAQPP NNIHSPAIRAYLKTIRQLDNKSVIDEIIEHLDKLIFQDAPETNISVPTDTHECKRFILTISQ QFSECMDLALKSLTSGAQQATT
<b>Endotoxin</b>	Less than 1 EU/g of rHuIL-31 as determined by LAL method.
<b>Purity</b>	>97% by SDS-PAGE and HPLC analysis.
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
<b>Reconstitution</b>	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 centigrade. Further dilutions should be made in appropriate buffered solutions.

## GENE INFORMATION

<b>Gene Name</b>	IL31
<b>Official Symbol</b>	IL31
<b>Synonyms</b>	IL31; interleukin 31; interleukin-31; IL 31; IL-31;
<b>Gene ID</b>	386653

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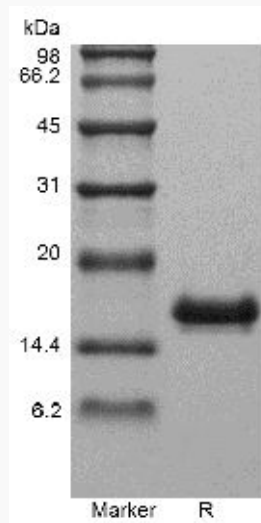
mRNA Refseq [NM\\_001014336](#)

Protein Refseq [NP\\_001014358](#)

MIM [609509](#)

UniProt ID [Q6EBC2](#)

**SDS-PAGE of IL31-  
641H**



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