

Recombinant Human IL31 protein

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

SPECIFICATION

Product Overview	Recombinant Human IL31 protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	141
Description	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.
Form	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4.
Bio-activity	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.
Molecular Mass	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 141

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	amino acids.
AA Sequence	SHTLPVRLRLPSDDVQKIVEELQSLSKMLLKDVVEEEKGVLVSQNYTLPCLSPPAQPP NNIHSPAIRAYLKTIRQLDNKSVIDEIIEHLDKLIFQDAPETNISVPTDTHECKRFILTISQ QFSECMDLALKSLTSGAQQATT
Endotoxin	Less than 1 EU/g of rHuIL-31 as determined by LAL method.
Purity	>97% by SDS-PAGE and HPLC analysis.
Storage	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.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	IL31
Official Symbol	IL31
Synonyms	IL31; interleukin 31; interleukin-31; IL 31; IL-31;
Gene ID	386653

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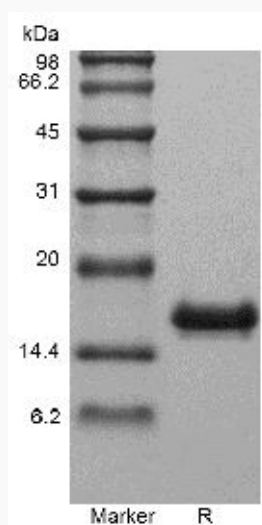
mRNA Refseq [NM_001014336](#)

Protein Refseq [NP_001014358](#)

MIM [609509](#)

UniProt ID [Q6EBC2](#)

SDS-PAGE of IL31-
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