

Recombinant Human Interleukin-31

#R00064

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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.

AA Sequence

SHTLPVRLLRPSDDVQKIVEELQSLSKMLLKDVVEEEK
GVLVSQNYTLPLCLSPDAQPPNNIHSPAIRAYLKIRQL
DNKSVIDEIIEHLDKLIFQDAPETNISVPTDTHECKRFIL

TISQQFSECMDLALKSLTSGAQQATT

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.

Product Specification

Accession	Q6EBC2
GeneID	386653
Species	Human
Source	Escherichia coli.
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. 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.
Physical	Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH7.4.
Endotoxin	Less than 1 EU/μg of rHuIL-31 as determined by LAL method.