

## 32-1511: IL 31 Recombinant Protein

**Alternative Name :** Interleukin 31,IL31,IL-31.

### Description

Source : Escherichia Coli. IL-31 human recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 141 amino acids (24-164 a.a.) and having a molecular mass of 15.8 kDa. IL-31 produced by activated Th2-type T cells, cooperates with a heterodimeric receptor consisting of IL-31 Receptor Antagonist and Oncostatin-M Receptor that is continuously expressed on epithelial cells and keratinocytes. IL-31 plays a role in the promotion of allergic skin disorders and in regulating other allergic diseases, such as asthma. IL-31 is involved in the itching sensation and endorses the scratching behavior in NC/Nga mice with atopic dermatitis. IL-31 expression is connected with CLA(+) T cells and contributes to the development of atopic dermatitis-induced skin inflammation and pruritus. IL-31 is a powerful inducer of proinflammatory mediators in human colonic SEMFs. IL-31 takes part as a proinflammatory cytokine derived from Th2 cells. Serum IL-31 level is higher in patients with atopic dermatitis. IL-31 is involved in a broad range of immune- & non-immune cells & possesses potential pleiotropic physiological functions, including regulating hematopoiesis & immune response, causing inflammatory bowel disease, airway hypersensitivity & dermatitis.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by(a) Analysis by SEC-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	The IL-31 (1mg/ml) was lyophilized with 20mM Phosphate buffer, 150mM NaCl pH-7.4.
<b>Storage condition :</b>	Lyophilized IL-31 Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-31 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	SHTLPVRLLR PSDDVQKIVE ELQSLSKMLL KDVEEEKGVL VSQNYTLPLCL SPDAQPPNNI HSPAIRAYLK TIRQLDNKSV IDEIIEHLDK LIFQDAPETN ISVPTDTHC KRFILTISQQ FSECMDLALK SLTSGAQQAT T.

### Application Note

It is recommended to reconstitute the lyophilized IL-31 in sterile 18MΩ·cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> was determined by its ability to activate STAT following receptor ligand interaction and found to be <5ng/ml, corresponding to a specific activity of 200,000 units.

