

## Recombinant Mouse Interleukin-31 (rm IL-31)

**Introduction:** IL-31 is a T-cell derived cytokine that shares several structural and functional characteristics with IL-6, Oncostatin M, LIF, and Cardiotrophin-1. It signals through a receptor complex comprised of GPL (GP130-like, IL-31RA) and OSMR (Oncostatin M receptor). 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.

**Description:** Recombinant mouse IL-31 produced in *E.Coli* a 15.8 kDa protein containing 140 amino acid residues

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.22 µm filtered solution in 25 mM sodium phosphate, pH 6.5 + 200 mM NaCl. The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm IL-31 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm IL-31 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rm IL-31 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Endotoxin level:** less than 0.1 ng per µg (1EU/µg) determined by LAL method

**Amino acid sequence:** MTCSLSFSGAP ISKEDLRRTTI DLLKQESQDL YNNYSIKQAS GMSADESIQL PCFSLDREAL TNISVIIAHL EKVKVLSSENT VDTSWVIRWL TNISCFNPLN LNISVPGNTD ESYDCKVFVL TVLKQFSNCM AELQAKDNTT C

**Biological activity:** testing in progress

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12340312
<i>medium</i>	10 µg	Cat.N°	12340313
<i>large</i>	50 µg	Cat.N°	12340315
<i>x-large</i>	250 µg	Cat.N°	12340317

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