

Recombinant Mouse Interleukin-31 (rm IL-31)

Synonyms. none

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 H₂O 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.

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

Amino acid sequence: MTCSLSFGAP ISKEDLRRTI DLLKQESQDL YNNYSIKQAS GMSADESIQL PCFSLDREAL TNISVIIAHL EKVKVLSNT VDTSWVIRWL TNISCFNPLN LNISVPGNTD ESYDCKVFVL TVLKQFSNCM AELQAKDNTT C

Biological activity: testing in progress

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<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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