



IL-31

E21-053

Catalog Number:E21-053**Amount:**10ug**Altername:**Interleukin-31; IL-31; IL31

Storage/Stability:Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Background:Human Interleukin 31 (IL-31) is a cytokine containing a four-helix bundle structure. It shares several structural and functional characteristics with IL-6, Oncostatin M, LIF, and Cardiotrophin-1. Human IL-31 cDNA encodes a 164 amino acid precursor that contains a 23 amino acid signal peptide and a 141 amino acid mature protein. Human and mouse IL-31 share 24% sequence identity in the mature region. IL-31 is mainly associated with activated T cells and is preferentially expressed by type 2 helper T cells (Th2). IL-31 signals via a heterodimeric receptor complex composed of a gp130 related molecule termed IL-31RA (also GPL and GLMR) and an Oncostatin M receptor (OSM R β). The IL-31 receptor is constitutively expressed by keratinocytes and upregulated by IFN γ on monocytes. 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. Studies have shown that IL31 induces severe pruritis (itching) and dermatitis in transgenic mice.

Species:Human

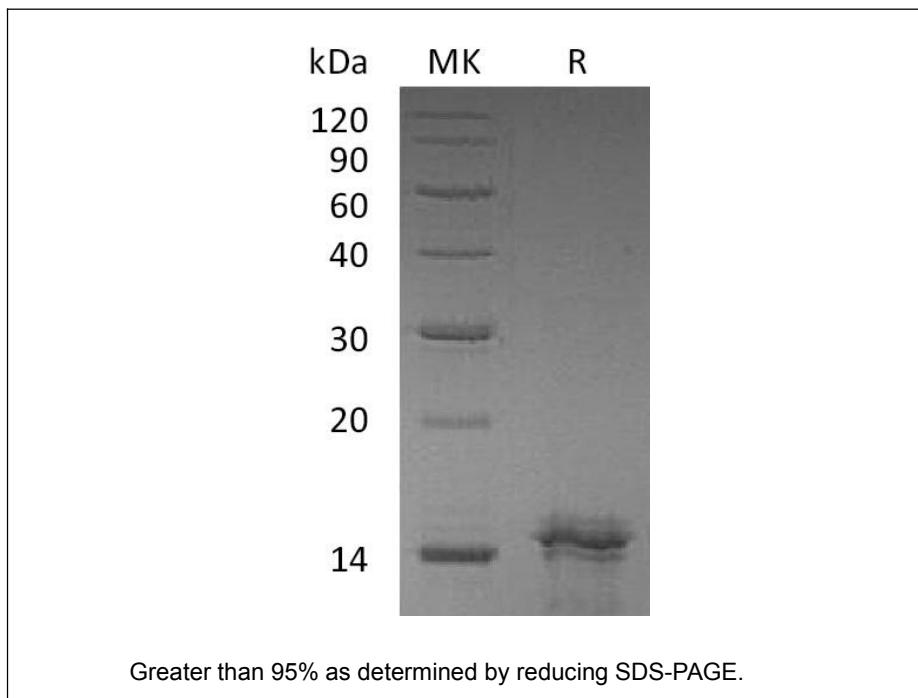
Reconstitution:Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin:Less than 0.1 ng/ μ g (1 IEU/ μ g) as determined by LAL test.**Purity:**Greater than 95% as determined by reducing SDS-PAGE.

Description:Recombinant Human Interleukin-31 is produced by our E.coli expression system and the target gene encoding Ser24-Thr164 is expressed.

Product State:Lyophilized**Ship Description:**The product is shipped at ambient temperature.**Formulation:**Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.**Expression system:**E.coli

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