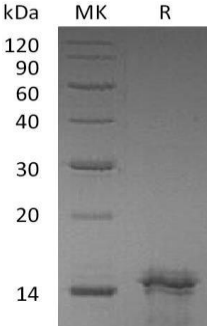


Recombinant Human IL-31

Catalog#:AC13095 Derived from E.coli

DESCRIPTION	<p>Recombinant Human Interleukin-31 is produced by our E.coli expression system and the target gene encoding Ser24-Thr164 is expressed.</p> <p>Accession#: Q6EBC2</p> <p>Knownas: Interleukin-31; IL-31; IL31</p>
FORMULATION	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
RECONSTITUTION	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100 µg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass: 15.8 kDa AP Mol Mass: 15 kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test.</p>
BACKGROUND	<p>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 Rβ). The IL-31 receptor is constitutively expressed by keratinocytes and upregulated by IFNγ 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.</p>
SDS-PAGE	 <p>kDa MK R</p> <p>120</p> <p>90</p> <p>60</p> <p>40</p> <p>30</p> <p>20</p> <p>14</p>