

Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

Recombinant Human Interleukin-31/IL-31 Protein

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3th Edition

Synonyms:Interleukin-31; IL-31; IL31

Description: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?). The IL-31 receptor is constitutively expressed by keratinocytes and upregulated by IFN? 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.

Form:PBS

Molecular Weight: 15.8 kDa

Sequences: Ser24-Thr164

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

1/1