

## **Product Datasheet**

## IL-31 Protein, Human, Recombinant (orb1962166)

## **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 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.

Storage -20°C

Tag Free

**Note** For research use only

**Application notes** Reconstitute the lyophilized protein in distilled water. The product concentration

should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or

pipetting for mixing.

**Protein Sequence** Ser24-Thr164

**Purity** 98.00%

MW 15 KDa (reducing condition)

Uniprot ID Q6EBC2

**Expiration Date** 6 months from date of receipt.