

Recombinant Human Interleukin-31/IL-31 Protein

Catalog Number:PKSH032640



Note: Centrifuge before opening to ensure complete recovery of vial contents.

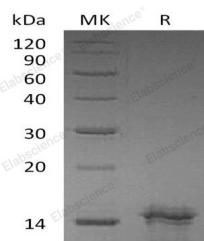
Description

Synonyms	Interleukin-31;IL-31;IL31
Species	Human
Expression Host	E.coli
Sequence	Ser24-Thr164
Accession	Q6EBC2
Calculated Molecular Weight	16.8 kDa
Observed molecular weight	18 kDa
Tag	C-His
Bioactivity	Measured by its ability to induce A549 cells proliferation. The ED ₅₀ for this effect is < 40 ng/mL

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

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

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: www.elabscience.com

Tel: 1-832-243-6086

Email: techsupport@elabscience.com

Fax: 1-832-243-6017

Recombinant Human Interleukin-31/IL-31 Protein

Catalog Number:PKSH032640



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.

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: www.elabscience.com

Tel: 1-832-243-6086

Email: techsupport@elabscience.com

Fax: 1-832-243-6017