Recombinant Human IL-31

Catalog No : PMK2195
Known As:Interleukin-31; IL-31; IL31

PROPERTIES

Description	Recombinant Human Interleukin-31 is produced by our E.coli expression system and the target gene encoding Ser24-Thr164 is expressed.
Accession	Q6EBC2
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Size	10μg/50μg/500μg/1mg
Purity	> 95%
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Predicted Mol Mass	15.8 KDa
Apparent Mol Mass	15 KDa, reducing conditions
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°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 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 andinflammatory skin diseases. Studies have shown that IL31 induces severe pruritis (itching) and dermatitis in transgenic mice.