

BACKGROUND

Interleukin-31 (IL-31) is an immunoregulatory cytokine that is mainly expressed by activated TH2 cells. IL-31 signals through the IL-31 Receptor (IL-31RA) and the oncostain receptor (OSMR), which are expressed on monocytes, epithelial cells, and keratinocytes. IL-31 has a role in inflammatory skin diseases.

Recombinant mouse IL-31 is a non-glycosylated protein, containing 141 amino acids, with a mass of 15.7 kDa.

Alternative Names:

None

Amino Acid Sequence:

MTCSLSFGAP ISKEDLRRTI DLLKQESQDL YNNYSIKQAS
GMSADESIQL PCFSLDREAL TNISVIAHL EKVKVLSNT
VDTSWVIRWL TNISCFNPLN LNISVPGNTD ESYDCKVFVL
TVLKQFSNCM AELQAKDNTT C

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant mouse IL-31 is lyophilized at a concentration of 1 mg/ml in 10 mM Na₂PO₄, pH 7.5.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

A standard activity has not yet been determined.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

