Specifications and Uses:

Alternate Names: None

Description:
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 molecular weight of 15.7 kDa.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:
Recombinant mouse IL-31 is lyophilized at a concentration of 1 mg/mL in 10 mM Na_2PO_4, pH 7.5.
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 (typically ≥ 97%) determined by:
Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:
Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.

Biological Activity:
The activity is determined by the dose dependent production of IL-8 from human PBMCs and is typically less than 25 ng/mL.

AA Sequence:
MTCSLSFGAP ISKEDLRTTI DLLKQESQDL YNNYSIKQAS GMSADESIQL PCFSLDREAL TNISVIIAHL
EKVKVLSENT VDTSWVIRWL TNISCFNPLN LNISVPGNTD ESYDCKVFVL TVLKQFSNCM AELQAKDNTT C

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!