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Datasheet for 010-001-V66-1000

rMouse IL-31 Protein

Overview

Description:	Mouse Interleukin IL-31 Recombinant Protein - 010-001-V66-1000
Item No.:	010-001-V66-1000
Size:	1 mg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

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 molecular weight of 15.7 kDa.
Synonyms:	Interleukin-31, IL-31, Interleukin 34
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Il31
Purity/Specificity:	Interleukin IL-31 purity was determined to be greater than 97% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - Q6EAL8

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Interleukin IL-31 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin IL-31 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the dose dependent production of IL-8 from human PBMCs and is typically less than 25 ng/mL.

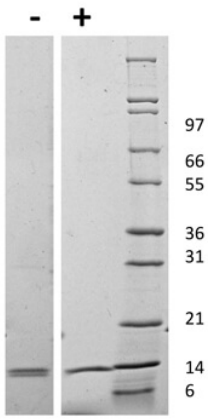
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

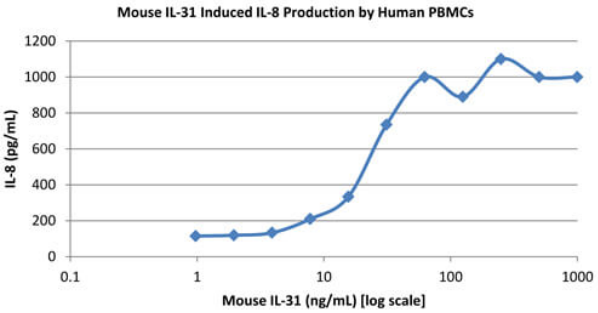
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Mouse Interleukin-31 Recombinant Protein. Lane 1: 1 µg Mouse IL-31 in non-reducing conditions (-). Lane 2: 1 µg Mouse IL-31 in reducing conditions (+). Lane 3: Molecular weight marker. Mouse IL-31 has a predicted MW of 15.7 kDa.



SDS-PAGE

Bioactivity of Mouse Interleukin IL-31 Recombinant Protein. Human PBMCs were cultured with 0 to 1000 ng/mL Mouse IL-31. Human IL-8 production was measured after 48 hours and the linear portion of the curve was us used to calculate the ED50. The ED50 of Mouse IL-31 is 16-24 ng/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.