

**Datasheet for 010-001-B50-0100****rMouse IL-33 Protein****Overview**

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| <b>Description:</b>  | Mouse Interleukin-33 Recombinant Protein - 010-001-B50-0100 |
| <b>Item No.:</b>     | 010-001-B50-0100                                            |
| <b>Size:</b>         | 100 µg                                                      |
| <b>Applications:</b> | Cellular Assay                                              |
| <b>Origin:</b>       | Mouse                                                       |
| <b>Expressed in:</b> | E. coli                                                     |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>        | Interleukin 33 (IL-33) is a member of the IL-1 cytokine family and is constitutively expressed in smooth muscle cells and the airway epithelium. IL-33 signals through receptors, IL-1RL1 and IL-1RAP, to induce type 2 cytokine production in polarized Th2 cells. Recombinant mouse IL-33 is a non-glycosylated protein, containing 159 amino acids, with a molecular weight of 17.7 kDa. |
| <b>Synonyms:</b>          | NP-HEV                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Species of Origin:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Expressed in:</b>      | E. coli                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Low Endotoxin:</b>     | Yes                                                                                                                                                                                                                                                                                                                                                                                         |

**Target Details**

|                            |                                                                                                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | Il33                                                                                                             |
| <b>Purity/Specificity:</b> | Interleukin-33 purity was determined to be greater than 90% as determined by reducing and non-reducing SDS-pAGE. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li><a href="#">UniProtKB - Q8BVZ5</a></li></ul>                               |

**Application Details**

|                                |                                                                                                                                                                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suggested Applications:</b> | Cellular Assay (Based on references)                                                                                                                                                                                                        |
| <b>Application Note:</b>       | Interleukin-33 Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-33 in immunological assays.                                                            |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                             |
| <b>Other:</b>                  | Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein. Biologic Activity: The activity is determined by the ability to induce the proliferation of D10S cells and is typically less than 1 ng/mL. |

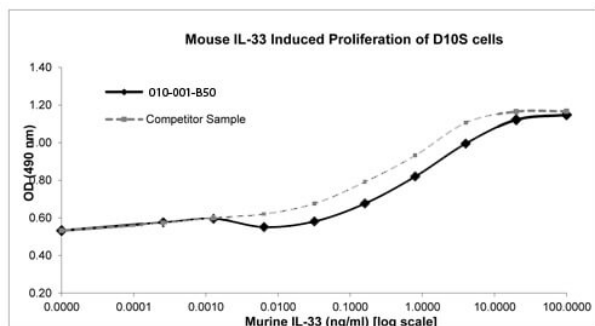
## Formulation

|                               |                                 |
|-------------------------------|---------------------------------|
| <b>Physical State:</b>        | Lyophilized                     |
| <b>Concentration:</b>         | 0.1 mg/ml                       |
| <b>Buffer:</b>                | 0.01 M Sodium Phosphate, pH 7.5 |
| <b>Preservative:</b>          | None                            |
| <b>Stabilizer:</b>            | None                            |
| <b>Reconstitution Volume:</b> | 100 $\mu$ L                     |
| <b>Reconstitution Buffer:</b> | 0.02M HCl                       |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vial at $-20^{\circ}$ 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 $-20^{\circ}$ 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. |
| <b>Expiration:</b>         | Expiration date is six (6) months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Images



### SDS-PAGE

Bioactivity of Mouse Interleukin-33 Recombinant Protein. D10S cells were cultured with 0 to 100 ng/mL Mouse IL-33 in low serum media containing no cytokines. After 67 hours of culture, proliferation was measured and the linear portion of the curve was used to calculate the ED50. The ED50 of Mouse IL-33 is 0.6-0.9 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.