

TECHNICAL DATA SHEET

Recombinant Mouse IL-33 (Carrier-free)

Catalog Number: 21-8332

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Mouse IL-33 (Carrier-free)

DESCRIPTION

IL-33 is a nuclear factor (also known as NF-HEV) that shares structural and functional characteristics with the IL-1 family of cytokines. It is constitutively expressed in smooth muscle and airway epithelia, and expression in various cell types can be upregulated after stimulation with IL-1alpha or IL-1beta. The IL-33 inactive precursor protein is cleaved by caspase-1 and the resulting C-terminal fragment functions as mature, active protein. It binds and signals through the IL-1RL1/ST2 receptor activating NF-kappaB and MAP kinases to induce Th2 associated cytokines.

MOLECULAR MASS

Recombinant murine IL-33 is a 17.5 kDa protein containing 158 amino acid residues.

AMINO ACID SEQUENCE

SIQGTSLLTQ SPASLSTYND QSVSFVLENG CYVINVDDSG KDQEQDQVLL RYYESPCPAS QSGDGVGK LMVNMSPKID
TDIWLHANDK DYSVELQRGD VSPPEQAFFV LHKSSDFVS FECKNLPPTY IGVKDNQLAL VEEKDESCNN IMFKLSKI

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

The ED₅₀ was determined by the dose-dependent stimulation of the proliferation of murine D10S cells is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶ units/mg.

RESEARCH AREAS

Immune System; Inflammation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Baekkevold ES, Roussigne M, Yamanaka T, Johansen FE, Jahnsen FL, Amalric F, Brandtzaeg P, Erard M, Haraldsen G and Girard JP. 2003. Am J Pathol. 163(1): 69-79. Dinarello CA. 2005. Immunity. 23(5): 461-462. Schmitz J, Owyang A, Oldham E, Song Y, Murphy E, McClanahan TK, Zurawski G, Moshrefi M, Qin J, Li X, Gorman DM, Bazan JF and Kastelein RA. 2005. Immunity. 23(5): 479-490. Barksby HE, Lea SR, Preshaw PM and Taylor JJ. 2007. Clin Exp Immunol. 149(2): 217-225.

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