

# **Mouse Interleukin-33**

Origin:	Recombinant	Cat. No.:	41750
Tag:	No tag	Size:	0.1 mg
Source:	E.coli	Purity:	>90%
Other names:	IL-33, IL-1F11	Species:	Mouse

# Description

Expressed in *E.coli* with total 160 AA. Mw: 17.7 KDa (calculated).

No tag, but with 2 extra AA at N-terminal (highlighted).

Recombinant antigen for research use or manufacturing only.

## **Introduction to the Molecule**

IL-33 was identified based on sequence and structural homology with IL-1 family cytokines. The N-terminal portion of full length IL-33 contains a predicted bipartite nuclear localization sequence and a homeodomain-like helix-turn-helix DNA binding domain. The C-terminal fragment, corresponding to mature IL-33, binds and triggers signaling through mast cell IL-1 R4/ST2L, a longtime orphan receptor involved in the augmentation of Th2 cell responses. A ternary signaling complex is formed by the subsequent association of IL-33 and ST2L with IL-1R AcP. Stimulation of Th2 polarized lymphocytes with mature IL-33 *in vitro* induces IL-5 and IL-13 secretion. *In vivo* administration of mature IL-33 promotes increased production of IL-5, IL-13, IgE, and IgA, as well as splenomegaly and inflammatory infiltration of mucosal tissues.

## **Amino Acid Sequence**

**GA**SIQGTSLLTQSPASLSTYNDQSVSFVLENGCYVINVDDSGKDQEQDQVLLRYYESPCPASQSGDGVDGK KLMVNMSPIKDTDIWLHANDKDYSVELQRGDVSPPEQAFFVLHKKSSDFVSFECKNLPGTYIGVKDNQLAL VEEKDESCNNIMFKLSKI

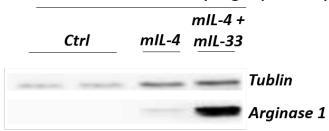


### **Endotoxin Level**

<0.2 EU per 1  $\mu$ g of the protein by the LAL method.

## **Bioactivity**

Bone-marrow-derived macrophages (BMDMs)



### **Formulation**

Lyophilized at 1 mg/mL in PBS.

### Reconstitution

Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

#### Storage

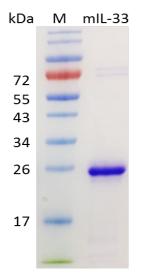
Store lyophilized protein at  $-20^{\circ}$ C. Aliquot reconstituted protein and store at  $-80^{\circ}$ C. Avoid repeated freezing /thawing cycles.

## **Quality Control Test**

BCA to determine quantity of the protein. SDS PAGE to determine purity of the protein.

## **SDS-PAGE** gel





#### **Contact Us**

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