## Recombinant Mouse Interleukin-33/IL-33 Protein

Catalog Number: PKSM041090



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Mouse
Mol_Mass	18.5 kDa
Accession	Q8BVZ5
Bio-activity	Measure by its ability to induce proliferation in D10.G4.1 cells. The $\mathrm{ED}_{50}$ for this
	effect is $<40$ pg/mL. The specific activity of recombinant mouse IL-33 is $> 2 \times 10^7$

IU/mg.

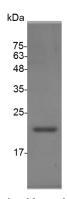
Properties	
Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	$< 0.1 \text{ EU}$ per $\mu g$ of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

## Data



> 98 % as determined by reducing SDS-PAGE.

## Background

Mouse Interleukin 33 (IL-33) is a 30 kDa proinflammatory cytokine which may also regulates gene transcription in producer cells. IL-33 is constitutively expressed in smooth muscle and airway epithelia. IL-33 was identified based on sequence and structural homology with IL-1 family cytokines. It is up-regulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL-1 alpha or IL-1 beta stimulation. IL-33 is structurally related to IL-1, which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1. BindingIL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces the expression of IL-4, IL-5, IL-13 and also leads to severe pathological changes in mucosal organs.

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