

**BACKGROUND:**

Interleukin 33 (IL-33) is a member of the IL-1 cytokine family and is constitutively expressed in smooth muscle and airway epithelial cells. IL-33 signals through the interleukin 1 receptor-like 1 (IL-1R1) and interleukin-1 receptor accessory protein (IL1RAP) receptors to activate NF-κB and MAPK signaling pathways. IL-33 functions to induce type 2 cytokine production in polarized Type 2 T helper (Th2) cells.

Recombinant mouse Interleukin 33 is a non-glycosylated protein monomer, containing 159 amino acids and having a molecular mass of 17.7 kDa.

**Cat. No.:**  
RP2036

**Alternate Names:**  
NP-HEV

**AA Sequence:**

MSIQGTSLLT	QSPASLSTYN	DQSVSFVLEN
GCYVINVDDS	GKDQEQDQVL	LRYYESPCPA
SQSGDGVGDK	KLMVNMSPIK	DTDIWLHAND
KDYSVELQRG	DVSPPEQAFF	VLHKKSSDFV
SFECKNLPGT	YIGVKDNQLA	LVEEKDESCN
NIMFKLSKI		

**TECHNICAL INFO**

**Source:**  
*E. coli*

**Physical Appearance:**  
Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**  
10 mM sodium phosphate, pH 7.5

**Stability:**  
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**  
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**  
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**  
The activity is measured by dose-dependent D10S cell proliferation, with Bioactivity Acceptance Criteria ED50 at 2 ng/mL.

**Animal Component-Free**  
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

