

BACKGROUND

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 human IL-33 is a non-glycosylated protein, consisting of 160 amino acids and having a total molecular mass of 18.1 kDa.

Alternative Names:

NP-HEV

Amino Acid Sequence:

MSITGISPIT EYLASLSTYN DQSITFALED ESYEIYVEDL
KKDEKKDKVL LSYYESQHPS NESGDGVDGK MLMVTLSPK
DFWLHANNKE HSVELHKCEK PLPDQAFFVL HNMHSNCVSF
ECKTDPGVFI GVKDNHLALI KVDSSENLCT ENILFKLSET

TECHNICAL INFORMATION**Source:** *E.coli***Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:Recombinant human IL-33 is lyophilized from 10 mM Na₂PO₄, 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. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

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 determined by the ability to induce the proliferation of D10.G4.1 cells co-stimulated with anti-CD3 and is typically 0.06-0.24 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

