

Human IL33 / Interleukin-33 / NF-HEV Protein



Sino Biological Inc.

Biological Solution Specialist

Catalog Number: 10368-HNAE

General Information

Gene Name Synonym:

C9orf26, DKFZp586H0523, DVS27, NF-HEV, NFEHEV, RP11-575C20.2

Protein Construction:

A DNA sequence encoding the C-terminal segment of human IL33 (NP_254274.1) (Ser 112-Thr 270) was expressed with an initial Met at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized human IL-33 at 10 µg/ml (100 µl/well) can bind human IL1RL1 with a linear range of 0.31-5 ng/ml.
2. Measured in a cell proliferation assay using D10.G4.1 mouse helper T cells costimulated with antiCD3. The ED50 for this effect is typically 0.15-0.6 ng/mL.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human IL33 comprises 160 amino acids and predicts a molecular mass of 18 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

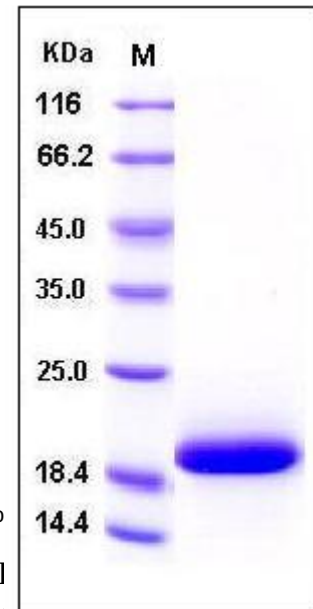
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution

≥ products.

Protein Description

Interleukin-33 (IL-33) is a proinflammatory protein and a chromatin-associated cytokine of the IL-1 family with high sequence and structural similarity to IL-1 and IL-18. IL-33 is expressed highly and rather selectively by high endothelial venule endothelial cells (HEVECs) in human tonsils, Peyer's patches, and lymph nodes. It contains a bipartite nuclear localization signal at the C-terminus, and is targeted to the nucleus when ectopically expressed in human umbilical vein endothelial cells (HUVECs) and HeLa cells. The C-terminal fragment, corresponding to mature IL-33, binds and triggers signaling. IL-33 mediates its biological effects via Toll-interleukin 1 (IL-1) receptor (TIR) domain-containing receptor ST2, activates NF-kappaB and MAP kinases, and drives production of T (H)2-associated cytokines from in vitro polarized T (H)2 cells. In vivo, IL-33 induces the expression of IL-4, IL-5, and IL-13 and leads to severe pathological changes in mucosal organs.

References

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