

Human IL33 / Interleukin-33 / NF-HEV Protein

Catalog Number: 10368-HNAE



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

C9orf26; DVS27; IL1F11; NF-HEV; NFEHEV

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: ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

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 by its ability to induce IL8 secretion by human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is typically 15-150ng/mL.

Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

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, mannitol and 0.01% Tween80 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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

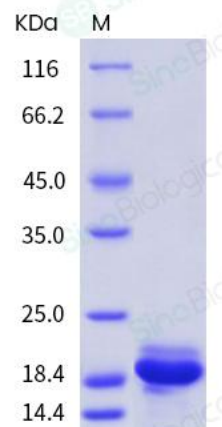
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin 33 (IL-33), also known as DVS27 or NF-HEV (Nuclear Factor from High Endothelial enules), 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 protein is expressed highly and rather selectively by high endothelial venule endothelial cells (HEVECs) in human tonsils, Peyer's patches, and lymph nodes. IL-33 protein has transcriptional regulatory properties, and the researches suggested that IL-33 is a dual-function protein that might act both as a cytokine and as an intracellular nuclear factor. As a type 2 cytokines, IL-33 protein also play a pivotal role in helminthic infection and allergic disorders.

References

likura M, et al. (2007) IL-33 can promote survival, adhesion and cytokine production in human mast cells. Lab Invest. 87(10): 971-8. Lamkanfi M, et al. (2009) IL-33 raises alarm. Immunity. 31(1): 5-7.