

## Product datasheet for TP728262M

### OriGene Technologies, Inc.

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## Recombinant IL-33 (Interleukin-33), Human

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant IL-33 (Interleukin-33), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MSITGISPITEYLASLSTYNDQSITFALEDESYEIYVEDLKKDEKKDKVLLSYYESQHPSNESGDGVDGKMLM VTLSPTKDFWLHANNKEHSVELHKCEKPLPDQAFFVLHNMHSNCVSFECKTDPGVFIGVKDNHLALIKVD

SSENLCTENILFKLSET with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 18.93 kDa. The protein migrates as 19 kDa under

reducing condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 7.4.

**Bioactivity:** Measure by its ability to binding with recombinant ST2L (IL-33 receptor). The ED₅₀ for this

effect is <54 ng/mL. Measure by its ability to induce proliferation in D10.G4.1 cells. The ED<sub>50</sub>

for this effect is < 0.1 ng/mL. The specific activity of recombinant human IL-33 is

approximately >4 x10<sup>7</sup> IU/ mg.

**Endotoxin:** <0.1 EU per 1 µg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu g/mL$  and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: <u>095760</u>

Synonyms: IL-1 F11, NF-HEV, DVS27

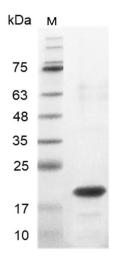




### **Summary:**

Interleukin 33 (IL-33) is an 18 kDa cytokine with 169 amino acid residues. Interleukin-33 is a member of the IL-1 cytokine family and is primarily expressed in endothelial cells, epithelial cells, fibroblasts, and mesenchymal cells. When IL-33 binds to its receptor, ST2L, it activates mast cells and innate lymphoid cells and subsequently generates IL-5 and IL-13, which play essential roles in allergic inflammation. IL-33 also acts as an alarm by alerting the immune system of cellular damage and plays a critical role in type-2 innate immunity.

# **Product images:**



SDS- PAGE analysis of recombinant human IL-33