

Recombinant Mouse Interleukin-33 (rm IL-33)

Synonyms: Interleukin-1 family member 11 (IL1F11), Nuclear factor from high endothelial venules (NF-HEV), DVS27, NKHEV

Introduction: Interleukin 33 (IL-33) is a 32kDa proinflammatory cytokine that may also regulate gene transcription in producer cells. IL-33 is structurally related to IL-1 which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1 (IL1 receptor-like-1) which is also known also as ST2. Binding of IL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces expression of IL-4, IL-5, IL-13 and leads to severe pathological changes in mucosal organs and in vitro, it can be divided to N-terminal fragment of 12kDa and C-terminal fragment of 18kDa by cleavage of caspase-1.

Description: Recombinant mouse IL-33 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 158 amino acids and having a molecular mass of 17.5 kDa.

Source: *Escherichia coli*

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

Formulation: Lyophilized from a sterile 0.2 µm filtered solution in PBS, 2 mM Mercaptoethanol

Solubility: It is recommended to reconstitute the lyophilized IL-33 in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm IL-33 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rm IL-33 should be stored at 4°C between 2-7days, for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-PAGE (silver stain).

Amino acid sequence: SIQGTSLLTQSPASLSTYND QSVSFVLENGCYVINVDDSG
KDQEQQVLLRYYESPCPAS QSGDGVGKMLMVMNSPIKD TDIWLHANDKDYSVELQRGD
VSPPEQAFFVLHKKSSDFVS FECKNLPGTYIGVKDNQLAL VEEKDESCNNIMFKLSKI

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of murine D10S cells is ≤ 0.5ng/ml, corresponding to a specific activity of 2×10⁶ units/mg.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12340332
<i>medium</i>	10 µg	Cat.N°	12340333
<i>large</i>	50 µg	Cat.N°	12340335
<i>x-large</i>	250 µg	Cat.N°	12340337

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