

Recombinant Human IL-33

Catalog No: C091

Description	Recombinant Human Interleukin-33 is produced by our E.coli expression system and the target gene encoding Ser112-Thr270 is expressed.
Expression System	E.coli
Alternative name	Interleukin-33; IL-33; Interleukin-1 Family Member 11; IL-1F11; Nuclear Factor From High Endothelial Venules; NF-HEV; IL33; C9orf26; IL1F11; NFHEV
Accession No.	O95760
Quality Control	Purity: greater than 90% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Background	Interleukin-33 (IL-33) was initially discovered as a nuclear factor NF-HEV abundantly expressed in high endothelial venules. It is a 30-32 kD pro-inflammatory protein with intracellular and extracellular activities 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 highly and selectively expressed 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. Human IL-33 is 270 amino acids in length.

SDS-PAGE



