



Recombinant Protein Technical Manual
Recombinant Human Interleukin-33/IL-33 Protein
RPES1454

Product Data:

Product SKU: RPES1454

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: O95760

Protein Information:

Molecular Mass: 18.1 kDa

AP Molecular Mass: 18 kDa

Tag:

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

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

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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB ,150mM NaCl,pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Interleukin-33; IL-33; Interleukin Family Member 11; ILF11; Nuclear Factor From High Endothelial Venules; NF-HEV; IL33; C9orf26; IL1F11; NFHEV

Immunogen Information:

Sequence: Ser112-Thr270

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 family with high sequence and structural similarity to IL and IL8. 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) 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 IL3 and leads to severe pathological changes in mucosal organs. Human IL-33 is 270 amino acids in length.