Recombinant Human Interleukin-33/IL-33 Protein

Catalog No. PKSH033616

**Description**

**Synonyms**
- Interleukin-33; IL-33; Interleukin-1 Family Member 11; IL-1F11; Nuclear Factor From High Endothelial Venules; NF-HEV; IL33; C9orf26; IL1F11; NFHEV

**Species**
- Human

**Expression_host**
- E.coli

**Sequence**
- Ser112-Thr270

**Accession**
- O95760

**Mol_Mass**
- 18.1 kDa

**AP_Mol_Mass**
- 18 kDa

**Tag**
- No tag

**Properties**

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

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

**Storage**
- Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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, pHi 7.4.

**Reconstitution**
- Please refer to the printed manual for detailed information.

**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, Peyers’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.
Thank you for your recent purchase. If you would like to learn more about proteins, please visit www.elabscience.com.