Recombinant Human Interleukin-33/IL-33 Protein

Catalog Number: PKSH033616

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

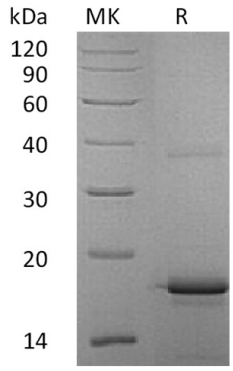
Description

Species	Human
Source	E.coli-derived Human Interleukin-33/IL-33 protein Ser112-Thr270
Mol_Mass	18.1 kDa
Accession	O95760
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Toll-free: 1-888-852-8623
Web:www.elabscience.com
Tel: 1-832-243-6086
Email:techsupport@elabscience.com
Fax: 1-832-243-6017

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.

Toll-free: 1-888-852-8623
Web:www.elabscience.com
Tel: 1-832-243-6086
Email:techsupport@elabscience.com
Fax: 1-832-243-6017