CHASELECTION

Recombinant Human Interleukin- 33/ IL-33

Catalog Number：CY045F0XXX

Synonym： NF-HEV

Source： *E.coli*

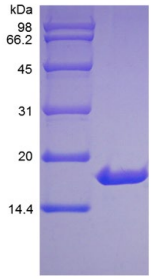
Structure:
Gene ID: NP_254274
AA Sequence：
SITGISPITE YLASLSTYND QSITFALEDE SYEIYVEDLK KDEKKDKVLL SYYESQHPSN ESGDGVDGKM LMVTLSPTKD FWLHANNKEH SVELHKCEKP LPDQAFFVLH NMHSNCVSFE CKTDPGVFIG VKDNHLALIK VDSSENLCTE NILFKLSET

Molecular Weight: 18.21kDa

Purity:

≥95% as determind by SDS-PAGE & HPLC

SDS-PAGE



SDS-PAGE showed a protein molecular weight of approximately 18.2kDa

Endotoxin:＜0.5 EU/μg

Formulation：

20mM PB，150mM NaCl，1mM EDTA，pH 7.4

Reconstitution

1. Before opening, please briefly centrifuge the contents to the bottom;

2. It is recommended to initially dissolve in sterile deionized water to an appropriate concentration (recommended concentration is 0.2-1mg/ml);

3.If further dilution is required, it is recommended to dilute the solution with a solution containing carrier proteins (eg., 0.1% BSA, 10% FBS, and 5% HSA).

Shipping & Storage:
The product is shipped with blue ice.

If long-term storage is required, this product should be stored at ≤ -20℃, please avoid repeated freeze-thaw cycles.

1. Dry powder can be stored at ≤ -20℃ for at least 24 months;

2. After reconstitution, it can be stored for 1 month under sterile conditions at 2-8 ℃ ;

3. After reconstitution, it can be stored for 12 months under sterile conditions at -20~ -70℃.

Description：

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.