

IL-33, Human

Cat. No.: Z02718-1

Size: 1.0 mg

Synonyms: Interleukin-33 (IL-33), Human;

Description:

IL33, also known as NFHEV and DVS 27, is a 30 kDa proinflammatory protein that may also regulate gene transcription. IL33 is constitutively expressed in smooth muscle and airway epithelia. It is upregulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL1^α or IL1^β stimulation. IL-33 shares structural and functional characteristics with the IL-1 cytokine family. It binds and signals through the IL-1RL1/ST2 receptor activating NF-kappaB and MAP kinases. IL-33 induces production of TH2 cell related cytokines, including IL-4, IL-5 and IL-13, and exerts multiple inflammation related bioactivities.

Amino Acid Sequence:

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00001 SITGISPITE YLASLSTYND QSITFALEDE SYEIYVEDLK  
00041 KDEKDKVLL SYYESQHPSN ESGDGVGKM LMVTLSPKDK  
00081 FWLHANNKEH SVELHKCEKP LPDQAFFVLH NMHSNCVSFE  
00121 CKTDPGVFIG VKDNHLALIK VDSSENLCTE NILFKLSET
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10⁷ IU/mg.

Molecular Weight: Approximately 17.9 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.

Formulation: Lyophilized from a 0.2μm filtered concentrated solution in 20 mM PB, 150 mM NaCl, 1mM EDTA, pH7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuIL-33 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.