

42750. Human Interleukin-33

Origin:	Recombinant	Cat. No.:	42750
Tag:	No tag	Size:	0.1 mg
Source:	E.coli	Purity:	>90%
Other names:	IL-33	Species:	Human

Description

Expressed in E.coli with total 167 AA. Mw: 18.81 KDa (calculated). No tag, but with 2 extra AA at N-terminal (highlighted). Recombinant antigen for research use or manufacturing only.

Introduction to the Molecule

IL-33 was identified based on sequence and structural homology with IL-1 family cytokines. The N-terminal portion of full length IL-33 contains a predicted bipartite nuclear localization sequence and a homeodomain-like helix-turn-helix DNA binding domain. The C-terminal fragment, corresponding to mature IL-33, binds and triggers signaling through mast cell IL-1 R4/ST2L, a longtime orphan receptor involved in the augmentation of Th2 cell responses. A ternary signaling complex is formed by the subsequent association of IL-33 and ST2L with IL-1R AcP. Stimulation of Th2 polarized lymphocytes with mature IL-33 in vitro induces IL-5 and IL-13 secretion. In vivo administration of mature IL-33 promotes increased production of IL-5, IL-13, IgE, and IgA, as well as splenomegaly and inflammatory infiltration of mucosal tissues.

Amino Acid Sequence

GASITGISPITEYLASLSTYNDQSITFALEDESYEIYVEDLKKDEKKDKVLLSYYESQHPSNESGDG
VDGKMETLMETVTLSPKDFWLHANNKEHSVELHKCEKPLPDQAFFVLHNMETHSNCVSFECK
TDPGVFIGVKDNHLALIKVDSSENLCTENILFKLSET

Endotoxin Level: <0.2 EU per 1 µg of the protein by the LAL method.

Formulation: Lyophilized at 1 mg/mL in PBS.

Reconstitution: Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

Storage: Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing/thawing cycles.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.

SDS-PAGE gel
