

41750. Mouse Interleukin-33

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|--------------|----------------|-----------|--------|
| Origin: | Recombinant | Cat. No.: | 41750 |
| Tag: | No tag | Size: | 0.1 mg |
| Source: | E.coli | Purity: | >90% |
| Other names: | IL-33, IL-1F11 | Species: | Mouse |

Description

Expressed in E.coli with total 160 AA. Mw: 17.7 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

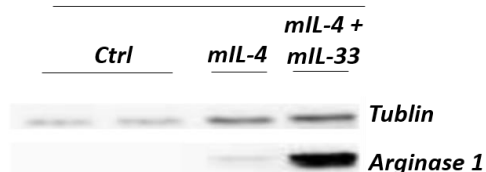
IL-33 was identified based on sequence and structural homology with IL-1 family cytokines. The N-terminal portion of full length IL-33 contains a predicted bipartite nuclear localization sequence and a homeodomain-like helix-turn-helix DNA binding domain. The C-terminal fragment, corresponding to mature 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

GASIQGTSLLTQSPASLSTYNDQSVSFVLENGCYVINVDDSGKDQEQDQVLLRYYESPCPASQSG
 DGVDGKKLMMVNMSPIKDTDIWLHANDKDYVELQRGDVSPPEQAFFVLHKKSSDFVSFECKNL
 PGTYIGVKDNQLALVEEKDESCNNIMFKLSKI

Endotoxin Level

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

Bioactivity
Bone-marrow-derived macrophages (BMDMs)

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

