Recombinant Mouse Interleukin-33/IL-33 Protein

Catalog Number: PKSM041090

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

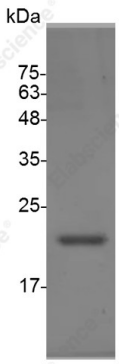
Description

Species	Mouse
Source	E.coli-derived Mouse Interleukin-33/IL-33 protein Ser109-Ile266 , with an C-terminal His
Calculated MW	18.5 kDa
Observed MW	17-25 kDa
Accession	Q8BVZ5
Bio-activity	Measure by its ability to induce proliferation in D10. G4.1 cells. The ED_{50} for this effect is <40 pg/mL. The specific activity of recombinant mouse IL-33 is > 2×10^7 IU/mg.

Properties

Purity	> 98% as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, 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



> 98 % as determined by reducing SDS-PAGE.

Background

Mouse Interleukin 33 (IL-33) is a 30 kDa proinflammatory cytokine which may also regulates gene transcription in producer cells. IL-33 is constitutively expressed in smooth muscle and airway epithelia. IL-33 was identified based on sequence and structural homology with IL-1 family cytokines. It is up-regulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL-1 alpha or IL-1 beta stimulation. IL-33 is structurally related to IL-1, which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1. BindingIL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces the expression of IL-4, IL-5, IL-13 and also leads to severe pathological changes in mucosal organs.

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