Recombinant Mouse IL-33 protein (His Tag)

Catalog Number: PDEM100264

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

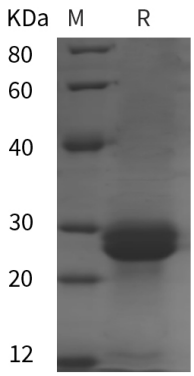
Description

Species	Mouse
Source	E.coli-derived Mouse IL-33 protein Ser109-Ile266, with an N-terminal His
Calculated MW	17.3 kDa
Observed MW	28 kDa
Accession	Q8BVZ5
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % 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.