



# Recombinant Protein Technical Manual

## Recombinant Mouse Interleukin-33/IL-33 Protein (Active) RPES1903

### Product Data:

**Product SKU:** RPES1903

**Size:** 10µg

**Species:** Mouse

**Expression host:** E. coli

**Uniprot:** Q8BVZ5

### Protein Information:

**Molecular Mass:** 17.6 kDa

**AP Molecular Mass:** 18 kDa

#### Tag:

**Bio-activity:** Immobilized Mouse IL-33 at 10µg/ml(100 µl/well) can bind Mouse ST2-Fc(Cat: PKSM041051). The ED50 of Mouse IL-33 is 1-5 ug/ml .

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Interleukin 33; IL-33; IL33; C9orf26; NKHEV; Interleukin family member 11; DVS27; NF-HEV and IL- 1F11

## Immunogen Information:

**Sequence:** Ser109-Ile266

## Background:

Mouse Interleukin 33 (IL-33) is a 30 kDa proinflammatory cytokine which may also regulate 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 family cytokines. It is up-regulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL alpha or IL beta stimulation. IL-33 is structurally related to IL, which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL. Binding IL-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, IL3 and also leads to severe pathological changes in mucosal organs.