

## Human IL-33 Protein, His tag (Animal-Free)

Cat #: PRP1091 Size: 5 µg/20 µg/100 µg/1 mg

## Product Information

	Product Name: Human IL-33 Protein, His tag (Animal-Free)		
REF	Catalog Number: PRP1091	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
Ŷ	Storage: Store at -20°C		Preparation method: E.coli
	Shipping: The product is shipped at ambient temperature.		

**Background:** Interleukin 33 (IL-33) is an 18 kDa cytokine with 169 amino acid residues. Interleukin-33 is a member of the IL-1 cytokine family and is primarily expressed in endothelial cells, epithelial cells, fibroblasts, and mesenchymal cells. When IL-33 binds to its receptor, ST2L, it activates mast cells and innate lymphoid cells and subsequently generates IL-5 and IL-13, which play essential roles in allergic inflammation. IL-33 also acts as an alarm by alerting the immune system of cellular damage and plays a critical role in type-2 innate immunity.

Sequence: Amino acid sequence derived from Human IL-33 (Ser112-Thr270) (Q9HBE4) was expressed with 6×His tag at the C-terminus.

**Protein length:** The recombinant Human IL-33 Protein consists of 159 amino acids and predicts a molecular mass of 18.9 kDa.

**<u>Biological Activity</u>**: Measured by its ability to binding with recombinant ST2L (IL-33 receptor). The ED<sub>50</sub> for this effect is <54 ng/mL. Measured by its ability to induce proliferation in D10.G4.1 cells. The ED<sub>50</sub> for this effect is < 0.1 ng/mL.

**<u>Endotoxin</u>**: <0.1 EU per  $\mu$ g of the protein as determined by the LAL method.

Formulation: Lyophilized from sterile PBS, pH 7.4.

**Storage Instructions:** Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-33 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant protein



to a concentration of 0.1-1 mg/mL using the buffer we provided, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.

kDa м 75 63 48 35 25 17 10	Fig. SDS-PAGE analysis of Human IL-33 Protein.
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