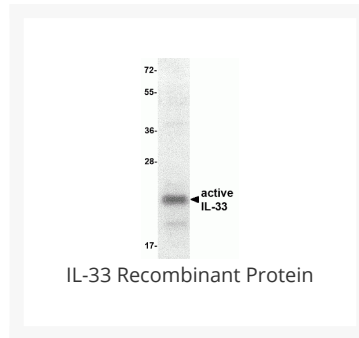




# IL-33 Recombinant Protein

Cat. No.: 95-111




## Ψ Specifications

<b>SPECIES:</b>	Human
<b>SOURCE SPECIES:</b>	E. coli
<b>SEQUENCE:</b>	aa 112 - 270
<b>FUSION TAG:</b>	<b>Fusion Partner:</b> C-terminal His-tag
<b>TESTED APPLICATIONS:</b>	ELISA, WB
<b>APPLICATIONS:</b>	This recombinant protein can be used for WB and ELISA. For research use only.
<b>PREDICTED MOLECULAR WEIGHT:</b>	22 kDa (Calculated)

## Ψ Properties

<b>PURITY:</b>	~95%
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	100mM sodium phosphate, 500mM NaCl, 25 mM imidazole, 10% glycerol
<b>STORAGE CONDITIONS:</b>	Store in working aliquots at -70 °C. Avoid freeze/thaw cycles. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

<b>OFFICIAL SYMBOL:</b>	IL33
<b>ALTERNATE NAMES:</b>	IL-33 Antibody: DVS27, IL1F11, NF-HEV, NFEHEV, C9orf26, NFHEV, Interleukin-33, Interleukin-1 family member 11, IL-33
<b>ACCESSION NO.:</b>	NP_254274
<b>PROTEIN GI NO.:</b>	15559209
<b>GENE ID:</b>	90865

 Background and References

<b>BACKGROUND:</b>	Interleukin-33 (IL-33) is a recently identified member of the IL-1 family of cytokines whose other members include IL-1 $\alpha$ , IL-1Ra and IL-18 (1,2). Its receptor has been shown to be ST2, an IL-1 receptor family member that also acts as a negative regulator of TLR-IL-1R signaling (1,3) and IL-1R accessory protein (IL-1RAcP) (4). Receptor binding of IL-33 activates NF- $\kappa$ B and MAP kinases and induces the expression of TH2-associated cytokines such as IL-4, IL-5 and IL-6. Prolonged IL-33 treatment of mice led to the development of eosinophilia, splenomegaly, and severe pathological changes in mucosal organs such as lungs, esophagus and small intestine (2). Recent experiments have shown that IL-33 can also co-localize with heterochromatin and possesses transcriptional repressor activities, indicating that IL-33 may function as both a proinflammatory cytokine and an intracellular nuclear factor with transcriptional regulatory properties (5). This recombinant protein represents the cleaved and presumably activated form of IL-33, but has not been tested in any biological assays.
<b>REFERENCES:</b>	1) Schmitz J, Owyang A, Oldham E, et al. IL-33, and interleukin-1-like cytokine that signals via the IL-1 receptor-related protein ST2 and induces T helper type 2-associated cytokines. <i>Immunity</i> 2005; 23:479-90.
	2) Dinarello CA. Interleukin-18, a proinflammatory cytokine. <i>Eur. Cytokine Netw.</i> 2000; 11:483-6.
	3) Brint EK, Xu D, Liu H, et al. ST2 is an inhibitor of interleukin 1 receptor and Toll-like receptor 4 signaling and maintains endotoxin tolerance. <i>Nat. Immunol.</i> 2004; 5:373-9.
	4) Chackerian AA, Oldham ER, Murphy EE, et al. IL-1 receptor accessory protein and ST2 comprise the IL-33 receptor complex. <i>J. Immunol.</i> 2007; 179:2551-5.

**ANTIBODIES FOR RESEARCH USE ONLY.**

For additional information, visit ProSci's [Terms & Conditions Page](#).