

## Recombinant Rat Interleukin-33 (Rat IL-33)

### Product Information

Product Name	Cat#	Size
Recombinant Rat Interleukin-33 (Rat IL-33)	90180ES10	10 µg
	90180ES60	100 µg
	90180ES76	500 µg

### Product Description

IL-33 (Interleukin-33) is released from physically damaged or necrotic cells. It triggers Th2-biased immune cell activation at sites of inflammation as well as regulatory T cell and M2 macrophage expansion. It additionally induces angiogenesis, promotes tumor cell migration and invasion, limits cardiac myocyte hypertrophy, and limits the development of atherosclerotic plaques. IL-33 signals through a receptor complex composed of ST2 and IL-1 RAcP. IL-1 RAcP also associates with IL-1 RI, IL-1 RII, IL-1 R6, and SCF R/c-kit. Soluble isoforms of ST2 and IL-1 RAcP function as decoy receptors that regulate IL-33 bioactivity.

### Product Properties

<b>Synonyms</b>	IL-33
<b>Accession</b>	Q66H70
<b>GeneID</b>	361749
<b>Source</b>	E.coli-derived Rat IL-33, Ser109-Met264.
<b>Molecular Weight</b>	Approximately 17.4 kDa.
<b>AA Sequence</b>	SIQGTSLLTE SCALSTYNDQ SVSFVLENGC YVINVEDCGK NQEKDKVLLR YYESSFPAQS GDGVDGKKLM VNMSPKDTD IWLNANDKDY SVELQKGDVS PPDQAFFVLH KKSSDFVSFE CKNLPGTYIG VKDNQLALVE ENDESCNNIM FKLSKM
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 95% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cell proliferation assay using murine D10S cells is less than 0.5 ng/mL, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg. Fully biologically active when compared to standard.
<b>Endotoxin</b>	< 1.0 EU per 1µg of the protein by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 300 mM NaCl, pH 8.5.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

### Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

## **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!