

Recombinant Rat IL33 protein

Cat. No. IL33-583R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat IL33 protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	156
Description	Interleukin-33 (IL-33), also known as NF-HEV and DVS 27, is a cytokine belonging to the IL-1 superfamily. It is also a proinflammatory protein that may regulate gene transcription and it induces helper T cells, mast cells, eosinophils and basophils to produce type 2 cytokines. The induction of type 2 cytokines by IL-33 in vivo is believed to induce the severe pathological changes observed in mucosal organs following administration of IL-33. IL-33 is constitutively expressed in smooth muscle and airway epithelia and it binds to a high-affinity receptor family member ST2. In vivo administration of mature IL-33 promotes increased production of IL-5, IL-13, IgE, and IgA, as well as splenomegaly and inflammatory infiltration of mucosal tissues. Recombinant rat IL-33 contains 156 amino acid residues and it shares 59 % a.a. and 90 % sequence identity with human and murine IL-33.
Form	Lyophilized from a 0.2µm filtered concentrated solution in 20 mM Tris, 300 mM NaCl, pH 8.5.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using murine D10S cells is less than 0.5 ng/ml, corresponding

 Tel: 1-631-559-9269 1-516-512-3133

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	to a specific activity of $> 2.0 \times 10^6$ IU/mg.
Molecular Mass	Approximately 17.4 kDa, a single non-glycosylated polypeptide chain containing 156 amino acids.
AA Sequence	SIQGTSLLTESCALSTYNDQSVSFVLENGCYVINVEDCGKNQEKKVLLRYYESSFP AQSGDGVGKKLMVMNSPIKDTDIWLNANDKDYSVELQKGDVSPPDQAFFVLHKKS SDFVSFECKNLPGTYIGVKDNQLALVEENDESCNNIMFKLSKM
Endotoxin	Less than 1 EU/g of rRtIL-33 as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	IL33
Official Symbol	IL33
Synonyms	IL-33

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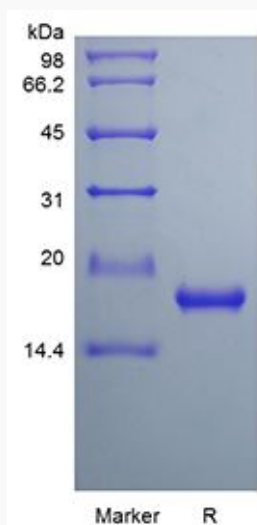
Gene ID 361749

mRNA Refseq NM_001014166

Protein Refseq NP_001014188

UniProt ID Q66H70

SDS-PAGE of IL33-
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