

Human IL-33 (Carrier-Free) Recombinant Protein, eBioscience™

Product Details

Size	10 µg
Species	Human
Amino acid sequence	Human IL-33, amino acids Ser112-Thr270 (Accession #NM_033439)
Molecular weight	21 kDa
Class	Recombinant
Type	Protein
Purity	>98% by SDS-PAGE and HPLC
Endotoxin concentration	<0.1 ng/µg
Activity	ED50 0.05 ng/mL; determined by the dose-dependent proliferation of mouse D10S cells.
Conjugate	Unconjugated
Form	Lyophilized
Storage conditions	-20°C

Applications	Tested Dilution	Publications
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-

Product Specific Information

Description: Human IL-33, also called NF-HEV and DVS 27, is a 30 kDa proinflammatory cytokine produced by endothelial and epithelial cells. IL-33 is released during necrotic cell death but was first found in the nucleus of endothelial cells. This dual pattern of expression is reminiscent of "alarmins" also known as endogenous danger signals. Other known alarmins are IL-1 alpha and HMGB1. IL-33 has been identified as the ligand for ST2 (also known as IL-33 receptor, a member of the IL-1 receptor family). ST2 is stably expressed on mast cells and Th2 effector T cells and is functionally associated with Th2-mediated inflammation. Although IL-33 was initially reported to be processed by Caspase-1, recent data indicate that Caspase-3 or -7 are capable of processing IL-33 at more physiologic concentrations. IL-33 plays an immune regulatory role by inducing IL-5 and IL-13 in vitro and in vivo and activating basophils, eosinophils and mast cells. In addition to its role in proinflammation, it may also decrease inflammation through interactions with IL-1 thereby blocking its effect. Human IL-33 shares 55% amino acid sequence identity with mouse.

Applications Reported: Human IL-33 Recombinant Protein Carrier-Free is biologically active and can promote the proliferation of D10S cells in culture.

Applications Tested: The ED50 of this protein, as measured by proliferation of mouse D10S cells, is less than or equal to 0.05 ng/mL.

Source: E. coli-expressed amino acids Ser112 -Thr270 (Accession #NM_033439).

Bioactivity: The ED50 of this protein, as measured by proliferation of mouse D10S cells, is less than or equal to 0.05 ng/mL.

Endotoxin: Less than 0.1 ng/ug cytokine as determined by the LAL assay. Purity: >98% as determined by SDS-PAGE and HPLC.

Molecular Weight: 21 kDa.

Storage and handling: Use in a sterile environment. Store lyophilized protein at less than or equal to -20°C. Reconstituted protein solution can be stored with carrier protein (e.g., 0.1% BSA) at less than or equal to -20°C.

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