

Technical Data Sheet

Flogen[®] Recombinant Human Interleukin-33 (rHuIL-33)

Catalog Number:	PGR0101-033
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 17.9 kDa, a single non-glycosylated polypeptide chain containing 160 amino acids.
Quantity:	2µg/10µg/1mg
AA Sequence:	MSITGISPIT EYLASLSTYN DQSITFALED ESYEIIYVEDL KKDEKKDKVL LSYYESQHPS NESGDGVDGK MLMVTLSPTK DFWLHANNKE HSVELHKCEK PLPDQAFFVL HNMHSNCVSF ECKTDPGVFI GVKDNHLALI KVDSSENLCT ENILFKLSET
Purity:	>97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by a cell proliferation assay using murine D10S cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁷ IU/mg.
Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2µm filtered concentrated solution in 20mM PB, 150mM NaCl, 1mM EDTA, 2mM β-Mercaptoethanol, pH7.4.
Endotoxin:	Less than 1EU/µg of rHuIL-33 as determined by LAL method.
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°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
Usage:	This material is for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Interleukin-33

Interleukin-33 (IL-33), also known as NFHEV and DVS 27, is a 30 kDa proinflammatory protein that may also regulate gene transcription. IL33 is constitutively expressed in smooth muscle and airway epithelia. It is upregulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL1α or IL1β stimulation. IL-33 shares structural and functional characteristics with the IL-1 cytokine family. It binds and signals through the IL-1RL1/ST2 receptor activating NF-kappaB and MAP kinases. IL-33 induces production of TH2 cell related cytokines, including IL-4, IL-5 and IL-13, and exerts multiple inflammation related bioactivities.