

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

IL33, encoded by the IL33 gene located on chromosome 9 in humans, is a pro-inflammatory protein belonging to the IL1 superfamily, but shares less than 20% amino acid sequence identity with other members. The mature IL33 protein has a 52-58% amino acid sequence identity with mouse and rat IL33. IL33 is secreted at high levels by high endothelial venules, which can be found in the tonsils, Peyer's patches and mesenteric lymph nodes, but not in the placenta. IL33 is upregulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL1G or IL1H stimulation. IL33 elicits its biological effects by interacting with IL1RL1/ST2, which in turn recruits MYD88, IRAK1, IRAK4, and TRAF6. This is then followed by the phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8.

Catalog Number	1110-33
Product Name	IL33, Human Recombinant Human Interleukin-33 IL33 Interleukin 33 IL1F11 Nuclear Factor from High Endothelial Venules (NFHEV) Chromosome 9 Open Reading Frame 26 (C9ORF26)
Source	<i>Escherichia coli</i>
MW	~17.9 kDa (159 amino acids)
Sequence	SITGISPITE YLASLSTYND QSITFALEDE SYEIYVEDLK KDEKKDKVLL SYYESQHPSN ESGDGVDGKM LMVTLSPTKD FWLHANNKEH SVELHKCEKP LPDQAFFVLH NMHSNCVSFE CKTDPGVFIG VKDNHLALIK VDSSENLCTE NILFKLSET
Accession Number	Q95760
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as 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.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.