

GFH145 Recombinant Human IL-33

Description

Interleukin-33 (IL-33) is a member of the IL-1 cytokine family and is constitutively expressed in smooth muscle and airway epithelial cells. IL-33 signals through the interleukin-1 receptor-like 1 (IL-1R1) and interleukin-1 receptor accessory protein (IL1RAP) receptors to activate NF-kappaB and MAPK signaling pathways. IL-33 functions to induce type 2 cytokine production in polarized Type 2 helper T (Th2) cells.

Length	160 aa
Molecular Weight	18.1 kDa
Source	E. coli
Accession Number	O95760
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

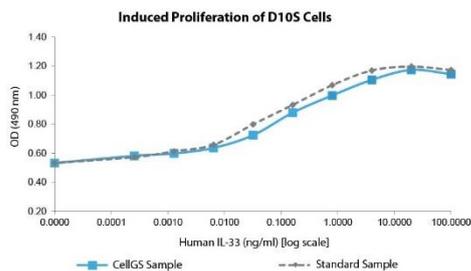
Specifications

Alternative Names	NP-HEV, interleukin-33, interleukin 33, IL33, IL 33
Biological Activity	Human IL-33 is fully biologically active when compared to standard. The activity is determined by the ability to induce D10S cells proliferation and it is typically less than 500 pg/ml. This corresponds to an expected specific activity of 2×10^6 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MSITGISPIT EYLASLSTYN DQSITFALED ESYEIIYVEDL KKDEKKDKVL LSYYESQHP NESGDGVGK MLMVTLSPK DFWLHANNKE HVELHKCEK PLPDQAFFVL HNMHSNCVSF ECKTDPGVFI GVKDNHLALI KVDSSLENLCT ENILFKLSET

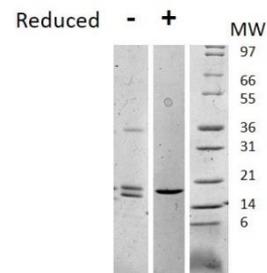
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of D10S cells assay for Human IL-33. Cell proliferation was measured to calculate the ED50, which is as expected less than 500 pg/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human IL-33 has a predicted Mw of 18.1 kDa.