

IL33

Recombinant Human Interleukin-33, Animal Free

Catalog No.	CRI225A-AF CRI225B-AF CRI225C-AF	Quantity:	2 µg 10 µg 1.0 mg
Alternate Names:	interleukin-33, IL-33, IL-1F11, DVS27-related protein, interleukin-1 family member 11, nuclear factor from high endothelial venules		
Description:	IL-33, encoded by IL-33 gene located on the Chr.9 in humans, is a 30 kDa proinflammatory protein belonging to the IL-1 superfamily and it shares less than 20% a.a. sequence identity with other members. IL-33 secreted by high endothelial venules at high levels, which is found in tonsils, peyer patches and mesenteric lymph nodes, but not in placenta. It is upregulated in arterial smooth muscle, dermal fibroblasts, and keratinocytes following IL-1 alpha or IL-1 beta stimulation. It elicits its biological effects by interacting with IL1RL1/ST2 and its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8. IL-33 mature protein has 52-58% a.a. sequence identity with mouse and rat IL-33.		
Gene ID:	90865		
UniProt ID:	O95760		
Source:	<i>E. coli</i>		
Molecular Weight:	Monomer, 18.1 kDa (160 aa)		
Formulation:	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5		
Purity:	≥ 95.0% by reducing and non-reducing SDS-PAGE		
Endotoxin Level:	≤1 EU/µg by kinetic LAL method.		
Biological Activity:	ED ₅₀ ≤ 500 pg/ml, determined by a cell proliferation assay using mouse 10S cells.		
Specific Activity:	≥ 2.0 × 10 ⁶ U/mg.		
Amino Acid Sequence:	MSITGISPIT EYLASLSTYN DQSITFALED ESYEIYVEDL KKDEKKDKVLSYYESQHPS NESGDGVDGK MLMVTLSPTK DFWLHANNKE HSVELHKCEK PLPDQAFFVL HNMHSNCVSF ECKTDPGVFI GVKDNHLALI KVDSENLLCT ENILFKLSET		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilution should be made in appropriate buffered solutions.		



Storage & Stability:

This lyophilized preparation is stable at 2-8°C. Upon receipt, store at -20°C to -80°C for up to 1 year. After 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 -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application. **Avoid repeated freeze/thaw cycles.**

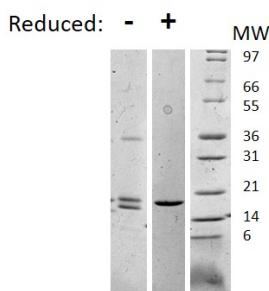
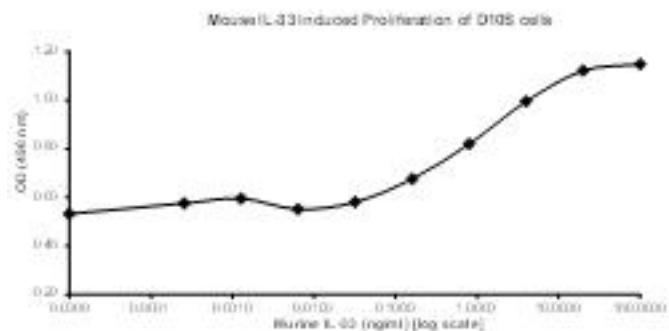
**Human IL-33**

Figure: 1 ug run under (+) reducing conditions and (-) non-reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human IL-33 has a predicted MW of 18.1 kDa.

D10S cells were cultured with 0 to 100 ng/ml Mouse IL-33 in low serum media containing no cytokines. After 67 hours of culture, proliferation was measured and the linear portion of the curve was used to calculate the ED50.



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