

Recombinant Human Interleukin-33

#R00065

Size: 10 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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 IL1α or IL1β 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.

AA Sequence

SITGISPITEYLASLSTYNDQSIITFALEDESYEIYVEDLK

KDEKKDKVLLSYYESQHPSPNESGDGVDGKMLMVTLSPTKDFWLHANNKEHSVELHKCEKPLPDQAFFVLHN MHSNCVSFECKTDPGVFIGVKDNHLALIKVDSSSENLC TENILFKLSET

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.

Product Specification

Synonyms	IL-1F11, NF-HEV, DVS 27
Accession	O95760
GeneID	90865
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 17.9 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.
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.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2μm filtered concentrated solution in 20 mM PB, 150 mM NaCl, 1mM EDTA, pH7.4.
Endotoxin	Less than 1 EU/μg of rHuIL-33 as determined by LAL method.