

Overview

Synonyms	Interleukin-13 Variant (IL-13 V), Human;
Description	The human IL-13 cDNA encodes a 132 amino acid protein containing a proposed 20 amino acid signal peptide. Human IL-13 shares approximately 30% amino acid sequence homology to human IL-4 and the two cytokines exhibit overlapping biological activities. Human IL-13 is produced by activated Th0, Th1-like Th2-like and CD8 T cells. Similarly to IL-4, IL-13 has multiple effects on the differentiation and functions of monocytes/macrophages. IL-13 can suppress the cytotoxic functions of monocytes/macrophages. It can also suppress the production of proinflammatory cytokines and upregulate the production of IL-1ra by monocytes/macrophages.
Species	Human
Source	<i>E. coli</i>
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using human TF-1 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁶ IU/mg.
Sequence	GPVPPSTALR ELIEELVNIT QNOKAPLCNG SMVWSINLTA GMYCAALES L INVSGCSAIE KTQRM LSGFC PHKVSAGQFS SLHVRDTKIE VAQFVKDLLL HLKKLFREGQ FN

Properties

Measured Molecular Weight	Approximately 12.3 kDa, a single non-glycosylated polypeptide chain containing 112 amino acids, with a substitution of Q for R at position 112 compared with the wild type IL-13.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.2, with 5 % trehalose.
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 d -20 °C. Further dilutions should be made in appropriate buffered solutions.
Endotoxin Level	Less than 1 EU/µg of rHuIL-13, Variant as determined by LAL method.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Usage	This material is for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.
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.

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