

Rev03  
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**DATASHEET**

# IL-13 Variant, Human

Cat. No.: Z02711

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>IL-13 Variant (Gly35-Asn146) Accession # P35225</b>
<b>Purity</b>	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
<b>Endotoxin Level</b>	< 1 EU/ $\mu$ g of protein by LAL method
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> 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 $> 2.0 \times 10^6$ IU/mg.
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	12.3 kDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS, pH 7.2, 5% trehalose.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** 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.

**Synonyms :** Interleukin-13 Variant; IL-13 V

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.