

IL-13, Mouse

Cat. No.: Z02770-1

Size: 1.0 mg

Synonyms: Interleukin-13 (IL-13), Mouse

Description:

IL-13 is an immunoregulatory cytokine produced primarily by activated Th2 cells, and also by mast cells and NK cells. Targeted deletion of IL-13 in mice resulted in impaired Th2 cell development and indicated an important role for IL-13 in the expulsion of gastrointestinal parasites. IL-13 exerts anti-inflammatory effects on monocytes and macrophages and it inhibits the expression of inflammatory cytokines such as IL-1beta, TNF-alpha, IL-6 and IL-8. IL-13 has also been shown to enhance B cell proliferation and to induce isotype switching resulting in increased production of IgE. Blocking of IL-13 activity inhibits the pathophysiology of asthma. Human and mouse IL-13 is cross-species reactive.

Amino Acid Sequence:

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00001 MPVPRSVSLP LTLKELIEEL SNITQDQTPL CNGSMVWSVD
00041 LAAGGFCVAL DSLTNISNCN AIYRTQRILH GLCNRKAPTT
00081 VSSLPDTKIE VAHFITKLLS YTKQLFRHGP F
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Source: *E. coli*

Species: Mouse

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using human TF-1 cells is less than 4 ng/ml, corresponding to a specific activity of > 2.5 × 10⁵ IU/mg.

Molecular Weight: Approximately 12.3 kDa, a single non-glycosylated polypeptide chain containing 111 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rMuIL-13 as determined by LAL method.

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.