

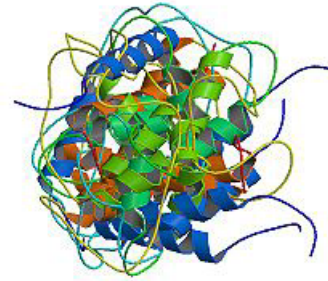
Interleukin-13

Human, Recombinant (rHuIL-13)

Expressed in *E. coli*

Cat. No. CRP0887

Lot. No. (See product label)



PDB rendering based on 1ga3.
Available structures: [1ga3](#), [1ijz](#), [1ik0](#)

PRODUCT INFORMATION

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.

Amino-Acid Sequence: 112aa, non-glycosylated

M. W. : approximately 12 kDa

Recombinant: Expressed in *E. coli*

Purity: >95% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2mm filtered concentrated solution in PBS, pH 7.2.

Specific Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by the dose-dependent proliferation of TF-1 cells was < 1.0 ng/ml, corresponding to a specific activity of > 1×10⁶ units/mg.

Endotoxin: Less than 1EU/mg of rHuIL-13 as determined by LAL method.

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.

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.

FOR RESEARCH USE ONLY

GENE INFORMATION

Gene Name: [IL13](#)

Synonyms: ALRH; BHR1; P600; IL-13; MGC116786; MGC116788; MGC116789; interleukin 13; IL13_HUMAN; Interleukin-13 [Precursor];NC30

mRNA Refseq: [NM_002188](#)

Protein Refseq: [NP_002179](#)

MIM: [147683](#)

GeneID: [3596](#)

UniProt ID: P35225

Chromosome Location: 5q31

Pathway: Cytokine-cytokine receptor interaction; Fc epsilon RI signaling pathway; Jak-STAT signaling pathway

Function: interleukin-13 receptor binding;protein binding;signal transducer activity

REFERENCES

- 1.Wynn TA. IL-13 effector functions. Annu Rev Immunol. 2003;21:425-56.
- 2.Wills-Karp M, Luyimbazi J, Xu X, Schofield B, Neben TY, Karp CL & Donaldson DD. Interleukin-13: central mediator of allergic asthma. Science 282, 2258-2261.
- 3.Marone G, Florio G, Petraroli A, de Paulis A (2001). Dysregulation of the IgE/Fc epsilon RI network in HIV-1 infection.. J. Allergy Clin. Immunol. 107 (1): 22-30.

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