



Recombinant Human IL-13

20200922BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-052
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	3596
Synonyms:	IL13; ALRH; BHR1; P600; IL-13

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-1 β , TNF- α , 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 murine IL-13 are cross-species reactive. Recombinant Human IL-13 is a 12.6 kDa protein consisting of 115 amino acid residues.

Sequence

MSPGPVPPST ALRELIEELV NITQNQKAPL CNGSMVWSIN
LTAGMYCAAL ESLINVGCS AIEKTQRMLS GFPCPHKVSAG
QFSSLHVRDT KIEVAQFVKD LLLHLKLFER EGRFN

Database References

Protein RefSeq:	NP_002179.2
Uniprot ID:	P35225
mRNA RefSeq:	NM_002188

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	115
MW:	12.6 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* NOTE: Slow to dissolve. Store at 2°C to 8°C for up to 1 week or prepare for extended storage. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The ED₅₀ as determined by the dose-dependent proliferation of TF-1 cells was \leq 1.0 ng/ml, corresponding to a specific activity of \geq 1 x 10⁶ units/mg.