

Recombinant Human IL-13 (Interleukin-13)

Product 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-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.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Activity	Typically ≤ 1.0 ng/mL ED ₅₀
Purity	$\geq 98\%$
Endotoxin	< 1.0 EU/ μ g
Molecular Mass	12.6 kDa
Formulation	20mM Sodium Phosphate, pH 7.0
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

Determined by its ability to stimulate the proliferation of human TF-1 cells.

AA Sequence

MSPGPVPPST	ALRELIEELV	NITQNQKAPL
CNGSMVWSIN	LTAGMYCAAL	ESLINVSGCS
AIEKTQRMLS	GFCPHKVSAG	QFSSLHVRDT
KIEVAQFVKD	LLLHLKKLFR	EGRFN

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Slow to dissolve. Do not vortex.

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% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

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