



IL-13 Recombinant Protein

CATALOG NUMBER: 40-258

Specifications

SPECIES:	Human
SOURCE SPECIES:	E. coli
SEQUENCE:	SPGPVPPSTA LRELIEELVN ITQNQKAPLC NGSMVWSINL TAGMYCAALE SLINVSGCSA IEKTQRMLSG FCPHKVSAGQ FSSLHVRDTK IEVAQFVKDL LLHLKLFRE GRFN
TESTED APPLICATIONS:	
BIOLOGICAL ACTIVITY:	The ED50 was determined by the dose - dependent proliferation of TF - 1 cells was ≤ 1.0 ng/mL, corresponding to a specific activity of $\geq 1 \times 10^6$ units/mg.

Properties

PURITY:	Greater than 98% by SDS-PAGE gel and HPLC analyses. Endotoxin level is less than 0.1 ng per ug (1EU/ug).
PHYSICAL STATE:	Lyophilized
STORAGE CONDITIONS:	The lyophilized IL-13 recombinant protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted IL-13 is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. As with any protein, exposing IL-13 recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

Additional Info

ALTERNATE NAMES:	P600, IL-13, NC30, Interleukin-13
ACCESSION NO.:	NP_002179.2
PROTEIN GI NO.:	26787978

Background

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 is cross-species reactive. Recombinant human IL-13 is a 12.5 kDa protein consisting of 114 amino acid residues.

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