



Recombinant Rat IL-13 (113aa)

20200903DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	R20-049S
Size:	2 µg
Lot. No.:	According to product label

Sequence

TPGFPVRRSTS PPVALRELIE ELSNITQDQK TSLCNSSMVW
SVDLTAGGFC AALESNTNIS SCNAIHRTQR ILNGLCNQKA
SDVASSPPDT KIEVAQFISK LLNYSKQLFR YGH

Database References

Protein RefSeq:	NP_446280.1
Uniprot ID:	P42203
mRNA RefSeq:	NM_053828

Scientific Background

Gene-ID (NCBI):	116553
Synonyms:	il13

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 rat IL-13 is a 12.3 kDa protein consisting of 113 amino acid residues.

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):	113
MW:	12.3 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 3 months at -20°C to -80°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2°C to 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 was determined by the dose-dependent proliferation of TF-1 cells is < 5.0 ng/ml, corresponding to a specific activity of > 2 x 10⁵ units/mg.