Recombinant Human IL-5

20230522DS

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**100-044S**
Size:	2 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	*3567*
Synonyms:	IL5; EDF; TRF; IL-5

IL-5 is a hematopoietic growth factor that stimulates the proliferation and activation of eosinophils. Produced by mast cells, T cells, and eosinophils, IL-5 plays an important role in inducing cell-mediated immunity against parasitic infections and certain tumors. Elevated levels of IL-5 lead to Eosinophilia, which may result in the induction of asthma and other allergic diseases. Human and murine IL-5 is cross-species reactive. Recombinant human IL-5 is a 26.5 kDa disulfide-linked homodimeric protein containing two 116 amino acid chains.

Sequence

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MIPTEIPTSA LVKETLALLS THRTLLIANE TLRIPVPVHK
NHQLCTEEIF QGIGTLESQT VQGGTVERLF KNLSLIKKYI
DGQKKKCGEE RRRVNQFLDY LQEFLGVMNT EWIIES
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Database References

Protein RefSeq:	NP_000840.1
Uniprot ID:	P05113
mRNA RefSeq:	NM_000879

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Structural Information	disulphide-linked homodimer
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized from 20mM Sodium Phosphate, pH 7.5
Length (aa):	116
MW:	26.5 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 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 2-8°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 ≤ 0.15 ng/ml, corresponding to a specific activity of ≥ 6.6 x 10^6 units/mg.