Recombinant Rat Il5 protein

Cat. No. Il5-2095R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Il5 protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	113
Description	IL-5, also named B-cell differentiation factor I, eosinophil differentiation factor and TRF, is belonging to the cytokine family and the IL-5 gene is in close proximity to the genes encoding IL-3, IL-4, and granulocyte-macrophage colony-stimulating factor (GM-CSF), which are often co-expressed in TH2 cells. Through binding to the IL-5 receptor, IL-5 stimulates B cell growth and increases immunroglobulin secretion. It is also a key mediator in eosinophil activation. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma.Rat IL-5 is a 132-amino acid (115 in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely IL-3 and GM-CSF), this glycoprotein in its active form is a homodimer.
Form	Lyophilized from a 0.2μm filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human TF-1 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0×10^6 IU/mg.

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Molecular Mass	Approximately 26.2 kDa, a disulfide-linked homodimeric protein containing two 113 amino acids.
AA Sequence	MEIPMSTVVKETLIQLSTHRALLTSNETMRLPVPTHKNHQLCIGEIFQGLDILKNQTVR GGTVEILFQNLSLIKKYIDGQKEKCGEERRKTRHFLDYLQEFLGVMSTEWAMEV
Endotoxin	Less than 1 EU/μg of rRtIL-5 as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Il5
Official Symbol	Il5
Synonyms	B-cell Differentiation Factor I, Eosinophil Differentiation Factor, TRF
Gene ID	24497

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mRNA Refseq	NM_021834
Protein Refseq	NP_068606
UniProt ID	Q08125
SDS-PAGE of Il5-2095R	

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