

# Recombinant mouse IL-5 protein

Catalog Number: ATGP4028

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

21-133aa

### UniProt No.

P04401

### NCBI Accession No.

NP\_034688.1

### Alternative Names

interleukin 5, IL5, IL-5, B-cell growth factor II, BCGF-II, Cytotoxic T-lymphocyte inducer, Eosinophil differentiation factor, T-cell replacing factor, TRF, B-cell differentiation factor I, EDF, IL5, TRFB cell differentiation factor I

## PRODUCT SPECIFICATION

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### Molecular Weight

14.2kDa (122aa)

### Concentration

0.25mg/ml (determined by Absorbance at 280nm)

### Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS - PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range  $\leq$  3 ng/ml.

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant mouse IL-5 protein

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## Description

IL5, also known as interleukin-5, is a member of the hematopoietin receptor superfamily and is comprised of a cytokine-specific alpha chain and the common beta chain that is shared among these cytokines for signaling. This interleukin produced by type-2 T helper cells and mast cells. It related hematopoietic cytokines that are important for allergic inflammation.. It is a lineage-specific cytokine for eosinophilpoiesis and plays an important part in diseases associated with increased eosinophils, such as asthma. In humans, IL-5 primarily affects cells of the eosinophilic lineage, and promotes their differentiation, maturation, activation, migration and survival, while in mice IL-5 also enhances Ig class switching and release from B1 cells. IL-5 also promotes differentiation of basophils and primes them for histamine and leukotriene release. Recombinant mouse IL-5, fused to His-tag at C-terminus, was expressed in HEK293 and purified by using conventional chromatography techniques.

## Amino acid Sequence

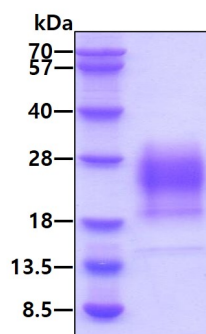
<DGS>MEIPMST VVKETLTQLS AHRALLTSNE TMRLPVPTHK NHQLCIGEIF QGLDILKNQT VRGGTVEMLF QNLSLIKYYI DRQKEKCGEE RRRTRQFLDY LQEFLGVMST EWAMEG<HHHH HH>

## General References

Martinez-Moczygamba M., et al. (2003) J Allergy Clin Immunol. 112:653-665.  
Milburn MV., et al. (1993) Nature. 363:172-176.

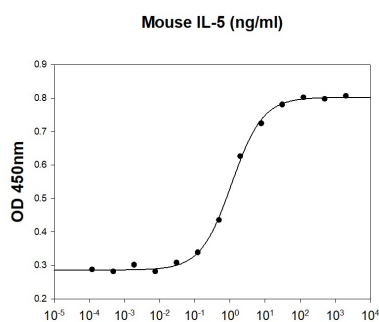
## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

### Biological Activity



Mouse IL-5 in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range  $\leq$  3 ng/ml.