Recombinant mouse IL-5 protein

Catalog Number: ATGP4028

PRODUCT INFORMATION

Expression system
HEK293

Domain
21-133aa

UniProt No.
P04401

NCBI Accession No.
NP_034688.1

Alternative Names
Interleukin-5, B-cell growth factor II, BCGF-II, Cytotoxic T-lymphocyte inducer, Eosinophil differentiation factor, T-cell replacing factor, TRF, EDF

PRODUCT SPECIFICATION

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 ≤ 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

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

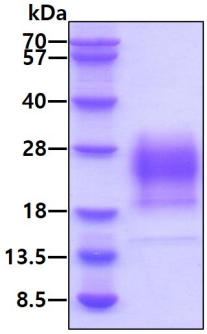
<DGS>MEIPMST VVKETLTQLS AHRALLTSNE TMRLPVPTHK NHQLCIGEIF QGLDILKNQT VRGGTVEMLF QNLSLIKKYI DRQKEKCGEE RRRTRQFLDY LQEFLGVMST EWAMEG<HHHH HH>

General References

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

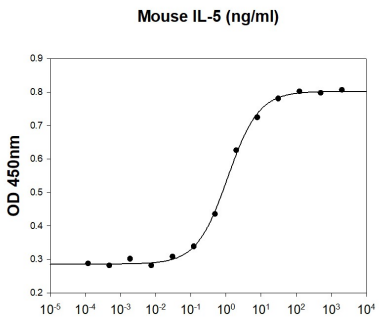
DATA

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 ≤ 3 ng/ml.