

# Recombinant human Adenosine Deaminase/ADA protein

Catalog Number: ATGP1116

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-363aa

### UniProt No.

P00813

### NCBI Accession No.

NP\_000013.2

### Alternative Names

Adenosine deaminase, Adenosine aminohydrolase, ADA1

## PRODUCT SPECIFICATION

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### Molecular Weight

42.9 kDa (383aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT

### Purity

> 90% by SDS-PAGE

### Endotoxin level

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

### Biological Activity

Specific activity is >40unit/mg, and is defined as the amount of enzyme that convert 1.0 umol of adenosine to inosine per minute at pH 7.5 at 25C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### 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 human Adenosine Deaminase/ADA protein

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## Description

ADA, also known as adenosine deaminase, catalyzes the hydrolytic deamination of adenosine and 2-deoxyadenosine. This protein plays an important role in purine metabolism and in adenosine homeostasis. ADA acts as a positive regulator of T-cell coactivation, by binding DPP4. Its interaction with DPP4 regulates lymphocyte-epithelial cell adhesion. Recombinant human ADA protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

## Amino acid Sequence

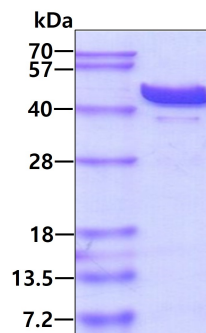
<MGSSHHHHHH SGLVPRGSH> MAQTPAFDKP KVELHVHLDG SIKPETILYY GRRRGIALPA NTAEGLLNVI GMDKPLTLPD FLAKFDYYMP AIAGCREAIK RIAYEFVEMK AKEGVVYVEV RYSPHLLANS KVEPIPWNQA EGDLPDEVV ALVGQGLQEG ERDFGVKARS ILCCMRHQPN WSPKVVELCK KYQQQTVVAI DLAGDETIPG SLLPGHVQA YQEAVKSGIH RTVHAGEVGS AEVVKEAVDI LKTERLGHGY HTLEDQALYN RLRQENMHFE ICPWSSYLTG AWKPDTEHAV IRLKNDQANY SLNTDDPLIF KSTLTDYQM TKRDMGFTEE EFKRLNINAA KSSFLPEDEK RELLDLLYKA YGMPPSASAG QNL

## General References

Gines S., et al. (2002) *Biochem.* 361:203-209  
Daddona P.E., et al. (1984) *J. Biol. Chem.* 259:12101-12106

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.