

# Recombinant mouse ALT1/GPT1 protein

Catalog Number: ATGP3530

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-496aa

### UniProt No.

Q8QZR5

### NCBI Accession No.

NP\_877957.1

### Alternative Names

Alanine aminotransferase 1, ALT, ALT1, Gpt-1, Gpt1

## PRODUCT SPECIFICATION

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### Molecular Weight

57.5 kDa (519aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 1mM DTT, 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

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

### Biological Activity

Specific activity is > 100unit/mg, and is defined as the amount of enzyme that convert 1umole of L-Alanine to L-Glutamate per minute at pH 7.5 at 37C

### 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 mouse ALT1/GPT1 protein

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## Description

Gpt, also known as alanine aminotransferases 1, catalyzes the reversible transamination between alanine and 2-oxoglutarate to form pyruvate and glutamate. This protein plays a key role in the intermediary metabolism of glucose and amino acids. It is widely used as an index of liver integrity or hepatocellular damage in clinical settings. Recombinant mouse Gpt protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

## Amino acid Sequence

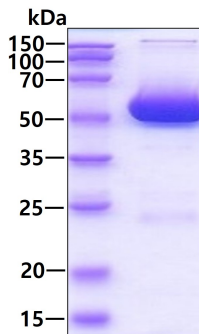
<MGSSHHHHHH SSGLVPRGSH MGS>MASQRND RIQASRNLK GKVLTLDTMN PCVRRVEYAV RGPVQRALE  
LEQELRQGVK KPFTEVIRAN IGDAQAMGQR PITFFRQVLA LCVYPNLLSS PDFPEDAKRR AERILQACGG HSLGAYSISS  
GIQPIREDVA QYIERRDGGI PADPNNIFLS TGASDAIVTM LKLLVAGEGR ARTGVLIPIP QYPLYSALA ELDAVQVDYY  
LDEERAWALD IAELRRALCQ ARDRCCPRVL CVINPGNPTG QVQTRECIEA VIRFAFEEGL FLMADEVYQD NVYAEGSQFH  
SFKKVLTEMG PPYATQQELA SFHSVSKGYM GECGFRGGYV EVVNMDAEVQ QMAKLMSVR LCPPVPGQAL MGMVVSPPTP  
SEPSFKQFQA ERQEVLAELA AKAKLTEQVF NEAPGIRCNP VQGAMYSFPQ IQLPLKAVQR AQDLGLAPDM FFCLCLEET  
GICVVPGS GF GQQEGTYHFR MTILPPMEKL RVLLEKLRHF HAKFTHEYS

## General References

Sohocki MM. et al. (1997) Genomics. 40(2):247-52.  
Matthews CC. et al. (2003) Brain Res. 978(1-2):59-64.

## DATA

### SDS-PAGE



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