

# Recombinant human ALT1/GPT1 protein

Catalog Number: ATGP1283

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

1-496aa

**UniProt No.**

P24298

**NCBI Accession No.**

NP\_005300.1

**Alternative Names**

alanine aminotransferase 1, AAT1, ALT1, GPT1, Alanine Transaminase, Alanine aminotransferase 1, ALAT1\_HUMAN, Glutamate pyruvate transaminase 1, Glutamic alanine transaminase 1, Glutamic pyruvate transaminase, Glutamic pyruvic transaminase 1, Glutamic--alanine transaminase 1, Glutamic--pyruvic transaminase 1, gpt, GPT 1

## PRODUCT SPECIFICATION

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**Molecular Weight**

56.8 kDa (516aa) 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, 2mM DTT

**Purity**

&gt; 90% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**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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**Description**

GPT, also known as alanine aminotransferases (ALT1), 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

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in clinical settings. Recombinant human GPT protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography.

## Amino acid Sequence

<MGSSHHHHH SSGLVPRGSH> MASSTGDRSQ AVRHGLRAKV LTLDGMNPRV RRVEYAVRGP IVQRALELEQ  
ELRQGVKKPF TEVIRANIGD AQAMGQRPIIT FLRQVLALCV NPDLLSSPNF PDDAKKRAER ILQACGGHSL GAYSVSSGIQ  
LIREDVARYI ERRDGGIPAD PNNVFLSTGA SDAIVTVLKL LVAGEGHTRT GVLIPQYP LYSATLAEELG AVQVDYYLDE  
ERAWALDVAE LHRALGQARD HCRPRALCVI NPGNPTGQVQ TRECIEAVIR FAFEERLFL L ADEVYQDNVY AAGSQFHSFK  
KVLMEMGPPY AGQQELASFH STSKGYMGEC GFRGGYVEVV NMDAAVQQQM LKLMSVRLCP PVPQGALLDL VVSPAPTDP  
SFAQFQAEKQ AVLAELAACA KLTEQVFNEA PGISCNPVQG AMYSFPRVQL PPRAVERAQE LGLAPDMFFC LRLLEETGIC  
VVPGSGFGQR EGTYHFRMTI LPPLEKLRL L LEKLSRFHAK FTLEYS

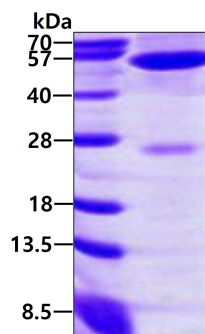
## General References

Sohocki M.M. et al. (1997) *Genomics* 40: 247-252.

Matthews C.C. et al. (2003) *Brain Res.* 978: 59-64.

## DATA

### SDS-PAGE



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