

Recombinant human ALT1/GPT1 protein

Catalog Number: ATGP3176

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-496aa

UniProt No.

P24298

NCBI Accession No.

NP_005300.1

Alternative Names

alanine aminotransferase 1, AAT1, ALT1, GPT1

PRODUCT SPECIFICATION

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

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 100unit/mg, and is defined as the amount of enzyme that cleaves 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

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 AQAMGQRPIT 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 PVPGQALLDL VVSPAPTDP
SFAQFQAEKQ AVLAELA AKA KLTEQVFNEA PGISCNPVQG AMYSFPRVQL PPRAVERAQE LGLAPDMFFC LRLLEETGIC
VVPGSGFGQR EGTYHFRMTI LPPLEKLRL L LEKLSRFHAK FTLEYS

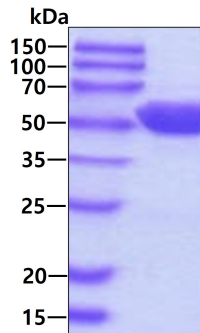
General References

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 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.