PRODUCT INFORMATION

Expression system E.coli

Domain 1-522aa

UniProt No. Q8BGT5

NCBI Accession No. NP_776291

Alternative Names

Alanine aminotransferase 2, ALT2, Glutamic--alanine transaminase 2, Glutamic-pyruvic transaminase 2, Glutamate pyruvate transaminase 2

PRODUCT SPECIFICATION

Molecular Weight

60.1 kDa (542aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 20% glycerol, 2mM DTT

Purity > 85% by SDS-PAGE

Endotoxin level

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

Biological Activity

Specific activity is > 50unit/mg, and is defined as the amount of enzyme that cleaves 1umole of L-Alanine to L-Glutamate per minuteat pH7.5 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

ALT2/GPT2, also known as alanine aminotransferase, catalyzes the reversible transamination between alanine and 2-oxoglutarate to form pyruvate and glutamate. Subsequently, they play a key role in the intermediary metabolism of glucose and amino acids. Recombinant mouse ALT2/GPT2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH M>QRAAVLVRR GSCPRASGPW GRSHSSAAAE ASAALKVRPE RSPRDRILTL ESMNPQVKAV EYAVRGPIVL KAGEIEMELQ RGIKKPFTEV IRANIGDAHA MGQQPITFLR QVMALCTYPN LLNSPSFPED AKKRARRILQ ACGGNSLGSY SASQGVNCIR EDVAAFITRR DGVPADPDNI YLTTGASDGI STILKLLVSG GGKSRTGVMI PIPQYPLYSA VISELDAVQV NYYLDEENCW ALNVDELRRA LRQAKDHCDP KVLCIINPGN PTGQVQSRKC IEDVIHFAWE EKLFLLADEV YQDNVYSPDC RFHSFKKVLY QMGHEYSSNV ELASFHSTSK GYMGECGYRG GYMEVINLHP EIKGQLVKLL SVRLCPPVSG QAAMDIVVNP PEPGEESFEQ FSREKEFVLG NLAKKAKLTE DLFNQVPGIQ CNPLQGAMYA FPRILIPAKA VEAAQSHKMA PDMFYCMKLL EETGICVVPG SGFGQREGTY HFRMTILPPV DKLKTVLHKV KDFHLKFLEQ YS

General References

Sohocki M.M. et al. (1997) Genomics 40(2):247-52. Matthews C.C. 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.

