PRODUCT INFORMATION

Expression system E.coli

Domain 30-430aa

UniProt No. P05202

NCBI Accession No. NP_034455

Alternative Names

AATM_HUMAN, AL022787, Aspartate aminotransferase, Aspartate aminotransferase 2, Aspartate aminotransferase, mitochondrial, Aspartate transaminase 2, ASPATA, EC 2.6.1.1, FABP 1, FABP pm, FABP-1, FABPpm, Fatty acid binding protein, Fatty acid-binding protein, FLJ40994, Glutamate oxaloacetate transaminase 2, Glutamate oxaloacetate transaminase 2, mitochondrial, Glutamate oxaloacetate transaminase, mitochondrial, Glutamic oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2), Got 2, GOT2, KAT4, KATIV, kynurenine aminotransferase 4, Kynurenine aminotransferase IV, kynurenine-oxoglutarate transaminase 4, kynurenine-oxoglutarate transaminase IV, mAspAT, MGC102129, MGC115763, mitAAT, mitochondrial, Mitochondrial aspartate aminotransferase, OTTMUSP00000017748, Plasma membrane fatty acid binding protein, Plasma membrane-associated fatty acid-binding protein, Transaminase A

PRODUCT SPECIFICATION

Molecular Weight

46.8 kDa (422aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

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

Biological Activity

Specific activity is > 20unit/mg, and is defined as the amount of enzyme that converts 1umole of alphaketoglutarate to L-Glutamate per minute at pH 8.0 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

Description

GOT2, also known aspartate aminotransferase, mitochondrial, belongs to the class-IPyridoxal-phosphatedependent aminotransferase family. Glutamate oxaloacetate transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and inner-membrane mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology. Recombinant mouse GOT2 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>SSWWTHVEM GPPDPILGVT EAFKRDTNSK KMNLGVGAYR DDNGKPYVLP SVRKAEAQIA AKNLDKEYLP IGGLAEFCKA SAELALGENN EVLKSGRFVT VQTISGTGAL RVGASFLQRF FKFSRDVFLP KPSWGNHTPI FRDAGMQLQG YRYYDPKTCG FDFSGALEDI SKIPEQSVLL LHACAHNPTG VDPRPEQWKE IASVVKKKNL FAFFDMAYQG FASGDGDKDA WAVRHFIEQG INVCLCQSYA KNMGLYGERV GAFTVVCKDA EEAKRVESQL KILIRPLYSN PPLNGARIAA TILTSPDLRK QWLQEVKGMA DRIISMRTQL VSNLKKEGSS HNWQHITDQI GMFCFTGLKP EQVERLTKEF SVYMTKDGRI SVAGVTSGNV GYLAHAIHQV TK

General References

Honorat JA., et al. (2017) PLoS One. 12(11):e0187215. Han Q., et al. (2010) BMC Biochemistry. 11:19.

DATA

SDS-PAGE



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