PRODUCT INFORMATION

Expression system E.coli

Domain 1-313aa

UniProt No. P45381

NCBI Accession No. NP_000040.1

Alternative Names Aspartoacylase, ACY2, ASP

PRODUCT SPECIFICATION

Molecular Weight 38.1 kDa (336aa) 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, 1mM DTT, 0.1M NaCl, 0.1mM PMSF

Purity

> 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

Description

ASPA, also known as aspartoacylase, is expressed in liver, lung and kidney tissue, as well as in skeletal muscle and in cerebral white matter. Existing as a homodimer, Aspartoacylase functions to catalyze the deacetylation of N-acetylaspartic acid (NAA) (a protein whose hydrolysis is crucial to maintenance of intact white matter) to produce acetate and L-aspartate. Recombinant human ASPA protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



Amino acid Sequence

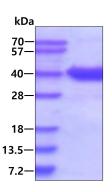
<MGSSHHHHHH SSGLVPRGSH MGS>MTSCHIA EEHIQKVAIF GGTHGNELTG VFLVKHWLEN GAEIQRTGLE VKPFITNPRA VKKCTRYIDC DLNRIFDLEN LGKKMSEDLP YEVRRAQEIN HLFGPKDSED SYDIIFDLHN TTSNMGCTLI LEDSRNNFLI QMFHYIKTSL APLPCYVYLI EHPSLKYATT RSIAKYPVGI EVGPQPQGVL RADILDQMRK MIKHALDFIH HFNEGKEFPP CAIEVYKIIE KVDYPRDENG EIAAIIHPNL QDQDWKPLHP GDPMFLTLDG KTIPLGGDCT VYPVFVNEAA YYEKKEAFAK TTKLTLNAKS IRCCLH

General References

Le Coq. et al. (2006) Biochemistry 45: 5878-5884. Le Coq. et al. (2008) Biochemistry 47: 3484-3492.

DATA

SDS-PAGE



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