

Recombinant human Adenosylhomocysteinease/AHCY protein

Catalog Number: ATGP3578

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

1-432aa

UniProt No.

P23526

NCBI Accession No.

NP_000678

Alternative Names

Adenosylhomocysteinase isoform 1, AHCY, AdoHcyase, SAHH, S-adenosylhomocysteine hydrolase

PRODUCT SPECIFICATION

Molecular Weight

48.8 kDa (441aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

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)

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

AHCY, also known as adenosylhomocysteinase isoform 1, is an enzyme that catalyzes the reversible hydrolysis of S-adenosylhomocysteine (AdoHcy) to adenosine (Ado) and L-homocysteine (Hcy). AdoHcy hydrolysis is a reversible reaction with an equilibrium favoring AdoHcy formation, but hydrolysis prevails under physiological conditions due to the rapid removal of adenosine and homocysteine. Thus, AHCYs activity in mammals is directly

Recombinant human Adenosylhomocysteinease/AHCY protein

Catalog Number: ATGP3578

related to homocysteine level, an independent risk factor for vascular disease. It also functions as a regulator of biological transmethylation by controlling the concentration of AdoHcy, a potent competitive inhibitor of all S-adenosyl-L-methionine methyltransferases. Recombinant human AHCY protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

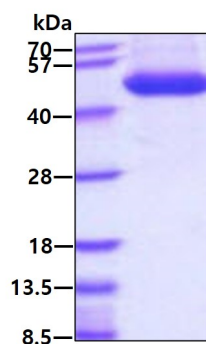
<ADL>MSDKLPY KVADIGLA AW GRKALDIAEN EMPGLMRMRE RYSASKPLKG ARIAGCLHMT VETAVLIETL
VTLGAEVQWS SCNIFSTQDH AAAAIAKAGI PVYAWKGETD EEYLWCIEQT LYFKDGPLNM ILDDGGDLTN LIHTKYPQLL
PGIRGISEET TTGVHNLYKM MANGILKVPA INVNDSVTKS KFDNLYGCRE SLIDGIKRAF DVMIAGKVAV VAGYGDVGKG
CAQALRGFGA RVIITEIDPI NALQAAMEGY EVTTMDEACQ EGNIFVTTTG CIDIILGRHF EQMKDDAIVC NIGHFDVEID
VKWLNENAVE KVNIPQVDR YRLKNGRRII LLAEGRLVNL GCAMGHPSFV MSNSFTNQVM AQIELWTHPD KYPVGVHFLP
KKLDEAVAEA HLGKLVNKLK KLTEKQAQYL GMSCDGPFPK DHYRY<HHHHH H>

General References

Vugrek O. et al., (2009) Hum Mutat. 30: E555-65.
Park SJ. et al., (2015) Am J Cancer Res. 5: 2127-2138.

DATA

SDS-PAGE



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