

AHCY, 1-432aa

Human, His-tagged, Recombinant, Insect cell

Cat. No. IBATGP3578

Full name: Adenosylhomocysteinase isoform 1

NCBI Accession No.: NP_000678

Synonyms: AHCY, adoHcyase, SAHH

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, AHCY's activity in mammals is directly 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.

| Form: Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol. | (kDa) |
|--|----------------------------------|
| Molecular Weight: 48.8kDa (441aa) 40-57KDa (SDS-PAGE under reducing conditions.) | 70 57 40 |
| Predicted N terminal: Ala | 28 |
| Purity: > 90% by SDS - PAGE. | 18 13.5 |
| Concentration: 0.25mg/ml (determined by Absorbance at 280nm) | 8.5 15% SDS-PAGE (3ug) |
| Endotoxin Level: < 1.0 EU per 1µg of protein (determined by LAL method) | 15 / 505 INSE (54g) |
| Sequences of amino acids: | |
| ADLMSDKLPY KVADIGLAAW GRKALDIAEN EMPGLMRMRE RYSASKPLKG ARIAGCLHMT VETAVLIETL VTLGAEVQWS SCNIFSTQDH | |

AAAAIAKAGI PVYAWKGETD EEYLWCIEQT LYFKDGPLNM ILDDGGDLTN LIHTKYPQLL PGIRGISEET TTGVHNLYKM MANGILKVPA INVNDSVTKS KFDNLYGCRE SLIDGIKRAT DVMIAGKVAV VAGYGDVGKG CAQALRGFGA RVIITEIDPI NALQAAMEGY EVTTMDEACQ EGNIFVTTTG CIDIILGRHF EQMKDDAIVC NIGHFDVEID VKWLNENAVE KVNIKPQVDR YRLKNGRRII LLAEGRLVNL GCAMGHPSFV MSNSFTNQVM AQIELWTHPD KYPVGVHFLP KKLDEAVAEA HLGKLNVKLT KLTEKQAQYL GMSCDGPFKP DHYRY<u>HHHHH H</u>

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Product information



General references:

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

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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