

# Product information

## Ahcy, 1-432aa

Mouse, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP3650

**Full name:** Adenosylhomocysteinase

**NCBI Accession No.:** NP\_057870

**Synonyms:** AA987153, AL024110, CuBP, SAHH

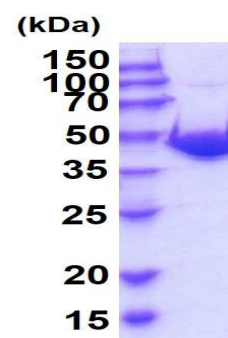
**Description:** Ahcy, also known as Adenosylhomocysteinase, is an enzyme that catalyzes the reversible hydrolysis of S-adenosylhomocysteine (AdoHcy) to adenosine (Ado) and L-homocysteine (Hcy). AdoHcy hydrolysis is a reversible reaction with an equilibrium favoring AdoHcy formation, but hydrolysis prevails 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 mouse Ahcy, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-Hcl buffer (pH8.0) containing 40% glycerol  
0.2M NaCl, 1mM DTT

**Molecular Weight:** 50.2 kDa (456aa) confirmed by MALDI-TOF

**Purity:** > 90% by SDS-PAGE

**Concentration:** 0.25 mg/ml (determined by Absorbance at 280nm)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSMSDKLP YKVADIGLAA WGRKALDIAE NEMPGLMRMR EMYSASKPLK GARIAGCLHM TVETAVLIET  
LVALGAEVRW SSCNIFSTQD HAAAAIAKAG IPVFAWKGET DEEYLWCIEQ TLHFKDGPLN MILDDGGDLT NLIHTKYPQL LSGIRGISEE  
TTTGVDHNLK MMSGNIGLKV AINVNDSTK SKFDNLYGCR ESLIDGKRA TDVMIAGKVA VVAGYGDVGK GCAQALRGFG ARVIITEIDP  
INALQAAMEG YEVTMTDEAC KEGNIFVTTT GCVDIILGRH FEQMKDDAIV CNIGHFDVEI DVKWLNENAV EKVNIKPVQD RYWLKNGRRI  
ILLAEGRLVN LGCAMGHPSF VMSNSFTNQV MAQIELWTHP DKYPVGHVFL PKKLDEAVAE AHLGKLVNKL TKLTEKQAQY LGMPINGPFK  
PDHYRY

### General references:

Vugrek O., *et al.* (2009) *Hum Mutat.* 30(4): E555-65.

Park S.J. *et al.*, (2015) *Am J Cancer Res.* 5(7):2127-2138

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



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# Product information

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**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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