Active AHCY, human recombinant

CATALOG #: 7527-10 10 μg 7527-50 50 μg

7527-1000 1 mg

SOURCE: E. coli

ALTERNATIVE NAMES: SAHH, AdoHcyase, S-adenosyl-L-homocysteine hydrolase,

Adenosyl Homocysteinase

FORM: Liquid

FORMULATION: 5 mg/ml in 50 mM potassium phosphate, 1 mM EDTA, pH 7.2

containing 20% glycerol.

PURITY: >90% by SDS-PAGE

MOL. WT.: 52.1 kDa (1-432 aa + N-terminal polyhistidine tag). In the

native form the protein exists in the tetrameric form and this

form is required for activity.

STORAGE CONDITIONS: Stable for at least 6 months as supplied. Dilute to 1 mg/ml with

a buffer containing 50 mM potassium phosphate, 1 mM EDTA, pH 7.2 and 20% glycerol and store at -80° C in aliquots. Avoid

repeated freeze thaw

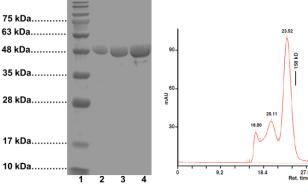
BACKGROUND:

AHCY (EC **3.3.1.1**) is an enzyme that catalyzes the reversible hydrolysis of S-adenosylhomocysteine (AdoHcy) to adenosine (Ado) and L-homocysteine (Hcy). AHCY controls the intracellular S-adenosylhomocysteine (SAH) concentration that is crucial for transmethylation reactions. AHCY deficiency causes hypermethioninemia. The recombinant human AHCY produced in E.Coli is a single, non-glycosylated polypeptide chain and is purified by proprietary chromatographic techniques.

SPECIFIC ACTIVITY:

BioVision's Active AHCY has been tested for its activity using Adenosyl Homocysteinase (AHCY) Activity Fluorometric Assay Kit (K807-100). It has a specific activity of >350 mU/mg (One unit of AHCY activity is the amount of enzyme that hydrolyzes the substrate to yield 1 μ mol of adenosine/min at 37°C).

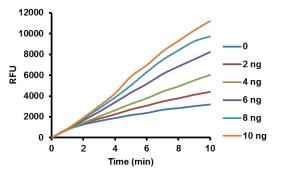
APPLICATIONS: Recombinant AHCY can be used in inhibitor screening, selectivity profiling and activity studies.



SDS-PAGE (15%) of h-AHCY:

- 1: Protein Marker
- 2: Human AHCY (10 µg)
- 3: Human AHCY (20 µg)
- 4: Human AHCY (30 µg)

SEC analysis of h-AHCY using a Superdex 200 HR 10/30 column at 0.5 ml/min in 50 mM Tris and 0.25 M NaCl pH 7.5.



Measurement of h-AHCY activity by Adenosyl Homocysteinase (AHCY) Activity Fluorometric Assay Kit (K807-100).

RELATED PRODUCTS:

- Adenosyl Homocysteinase (AHCY) Activity Fluorometric Assay Kit (Cat. No. K807-100)
- AHCY, human recombinant (Cat. No. 4889-20, -1000)
- S-Adenosyl-L-methionine disulfate tosylate (Cat. No. 2077-50, -100, -500)
- Adenosine Antibody (Cat. No. 6652-100)
- N6-Methyladenosine Antibody (Cat. No. 6653-100)
- ADP Colorimetric Assay Kit II (Cat. No. K356-100)
- ADP Colorimetric/Fluorometric Assay Kit (Cat. No. K355-100)
- ATP Colorimetric/Fluorometric Assay Kit (Cat. No. K354-100)
- StayBrite™ Highly Stable ATP Bioluminescence Assay Kit (Cat. No. K791-100, 1000)

For Research Use Only! Not to be used in humans.

