

# 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

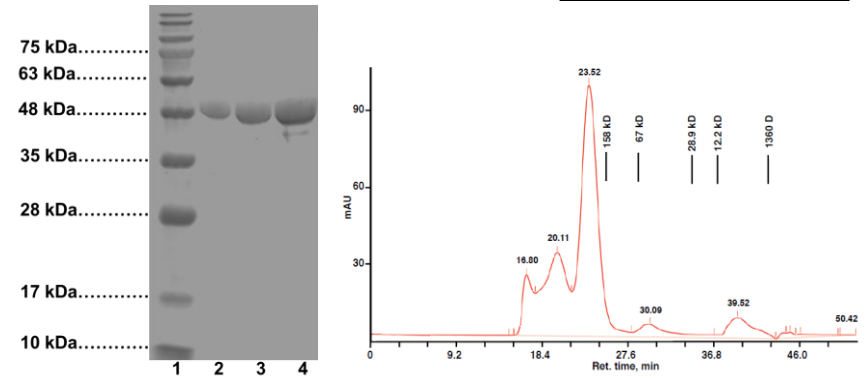
**MOL. WT.:** 52.1 kDa (1-432 aa + N-terminal polyhistidine tag). In the native form the protein exists in the tetrameric form and this form is required for activity.

**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.

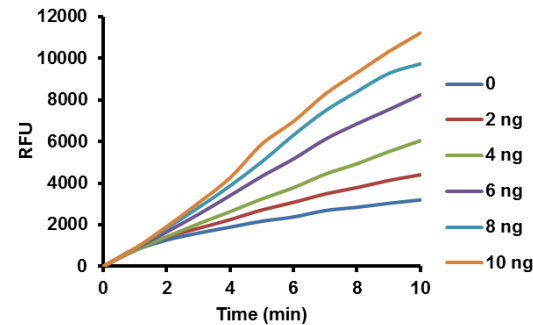
**SPECIFIC ACTIVITY:** BioVision's Active AHCY has been tested for its activity using Adenosyl Homocysteinase (AHCY) Activity Fluorometric Assay Kit (K807-100). It has a specific activity of >350 mU/mg (One unit of AHCY activity is the amount of enzyme that hydrolyzes the substrate to yield 1 µmol of 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.**