

## S-adenosyl-L-homocysteine hydrolase

**CAT. No.:** S12-SAHH-4011

**Reaction:** S-adenosyl-L-homocysteine + H<sub>2</sub>O → Adenosine + L-homocysteine

### Product Description

Appearance:	White powder, lyophilized
Source:	Microorganism
EC Number:	EC 3.3.1.1
CAS Number:	9025-54-1
Storage temperature:	-20 C
Specific activity:	≥2.0 U/mg powder
Unit definition:	One unit will hydrolyze one micromole of S-adenosyl-L-homocysteine per min at pH 7.2 at 37 C.

### Properties

Molecular weight:	44~45 kD
Isoelectric point:	5.90
Michaelis constant:	2.3×10 <sup>-4</sup> M (S-adenosyl-L-homocysteine)
Optimum pH:	6.50
Optimum temperature:	40 C
pH stability:	5.0~10.0 (25C, 20hr)
Thermal stability:	< 45C (pH 7.2, 20min)
Inhibitors:	Ag <sup>+</sup> , Hg <sup>2+</sup> , EDTA, Cu <sup>2+</sup>
Effect of various chemicals:	(Table 1)

### Table 1

Effect of various chemicals on S-adenosyl-L-homocysteine hydrolase

The enzyme dissolved in 50mM K-phosphate buffer, pH 7.5 (2U/ml) was incubated with each chemical at 37C for 2hr.

Chemical	Concn. (mM)	Residual activity	Chemical	Concn. (mM)	Residual
None	-	100%	EDTA	5.0	0%
Zn <sup>2+</sup>	2.0	50%	NaN <sub>3</sub>	20.0	95%
Cu <sup>2+</sup>	2.0	0%	Tween 20	0.10%	102%
Fe <sup>3+</sup>	2.0	98%	Triton X-100	0.10%	103%
Ca <sup>2+</sup>	2.0	98%	SDS	0.05%	86%
Mg <sup>2+</sup>	2.0	91%	Proclin	0.05%	0%