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## Product Information

### S-(5'-Adenosyl)-L-homocysteine

Product Number **A 9384**  
Storage Temperature -0 °C

#### Product Description

Molecular Formula: C<sub>14</sub>H<sub>20</sub>N<sub>6</sub>O<sub>5</sub>S  
Molecular Weight: 384.4  
CAS Number: 979-92-0  
Extinction Coefficient: E<sup>mM</sup> = 15.4 (260 nm in water or 0.1 M NaCl)<sup>1</sup>

S-Adenosyl-L-homocysteine is the product of enzymatic transmethylation reactions involving S-Adenosylmethionine (SAM). It may be reconverted to SAM after cleavage into adenosine and L-homocysteine, which is the substrate of thein-homocysteine S-methyltransferase (EC 2.1.1.3)

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

The product is soluble in water (1 mg/ml).

#### Storage/Stability

S-Adenosyl-homocysteine is slowly oxidized to the sulfoxide as a solid and in solution, and is protected from oxidation by thiodiglycol. It is hydrolyzed in acid solution (0.1 M HCl, 100 °C over 90 minutes) forming S-ribosylhomocysteine. S-Adenosyl-homocysteine is not hydrolyzed in neutral or alkaline solutions (stable in 0.1 M NaOH at 25 °C over 10 minutes), but oxidation is more rapid in alkaline solution. Neutral solutions containing thiodiglycol are stable for long periods at 25 °C.<sup>2</sup>

#### References

1. Shapiro, S. K., and Ehninger, D. J. Anal. Biochem., **15(2)**, 323-333 (1966).
2. Dawson, R.M.C., et al., Data Biochemical Research, 3rd ed., p. 2-3., Oxford University Press, New York, (1986).

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