

Product Information

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

ready made solution

1 mg/mL in 0.02 M HCl

Catalog Number **SAE0099**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 979-92-0

Synonyms: 5'-Deoxy-S-adenosyl-L-homocysteine, AdoHcy, S-(5'-Deoxyadenosine-5')-L-homocysteine, SAH

Product Description

S-(5'-Adenosyl)-L-homocysteine (SAH) is a compound that occurs biologically as a by-product of reactions which S-adenosyl-L-methionine-dependent methyltransferases catalyze.¹ These enzymes use S-adenosyl-L-methionine (SAM) as the parent material for cellular methyl transfer processes, such as DNA methylation. In its turn, SAH is cleaved by SAH hydrolase to produce homocysteine and adenosine.²

The homocysteine pathway and the plasma measurement of SAM and SAH³ have been studied in relation to topics such as cancer,⁴ nutritional deficiencies,⁵ and Alzheimer's disease.^{6,7} SAH has been used to develop various methyltransferase activity assays, such as the following:

- Multiwell plate assay for protein methyltransferase SET7/9 activity⁸
- Fluorescence polarization (FP) assay⁹
- HPLC assay coupled to fluorometric detection¹⁰

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

This product is offered as a 1 mg/mL aqueous-based solution of S-(5'-Adenosyl)-L-homocysteine in 0.02 M HCl. This product should be stored at $-20\text{ }^{\circ}\text{C}$. It is recommended to avoid freeze-thaw cycles. When stored properly, this product is expected to be stable for 2 years.

References

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