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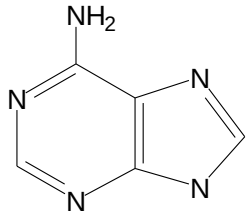
Product Information

Adenine

Catalog Number **A8626**
Store at Room Temperature

CAS RN 73-24-5
Synonyms: adeninimine, 6-aminopurine, 6-amino-1H-purine, vitamin B4, 1,6-dihydro-6-iminopurine

Product Description



Molecular formula: $C_5H_5N_5$
Molecular weight: 135.13
E^{mM} (263 nm):[1,2] 13.2 (1.0 M HCl)

Adenine is found in every plant and animal tissue; it is one of the four bases in DNA, and is a constituent of numerous coenzymes. Numerous references to its use occur in biochemical literature.

This product is synthetic; our supplier considers production details proprietary. A method of synthesis of C^{14}-labeled adenine and 8-azaadenine was developed due to interest as a possible anticancer agent.[3]

Precautions and Disclaimer

This product is 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.

Preparation Instructions

Adenine is soluble in 1 M HCl at 20 mg/mL, obtaining a clear colorless solution.
Note: The hydrochloride salt is directly water-soluble.

Adenine is soluble at 1 part in ~2,000 parts of cold water, 1 part in 40 of boiling water; slightly soluble in hot alcohol; insoluble in chloroform, ether; soluble in hot NH_4OH.[2,4,5]

Solutions may be stored at 2–8 °C for months if sterile-filtered.

Storage/Stability

Store the product at room temperature.

References

1. *Spec. & Criteria for Biochem. Compounds*, 3rd ed., p. 157.
2. *Merck Index*, 12th ed., #150 (1996).
3. *J. Amer. Chem. Soc.*, **74**, 2422 (1952).
4. *Lange's Handbook of Chemistry*, 12th ed., Dean, J.A., ed, Table 7-5 (p. 7-394).
5. *Martindale: The Extra Pharmacopoeia*, 30th ed. (Pharmaceutical Press, 1993), p. 1331.

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