Bio Basic Inc.

Product Information Adenine

Product Name: Adenine Product Code: AD0013

CAS #: 73-24-5

Synonyms: adeninimine; 6-aminopurine; 6-amino-1H-purine; vitamin B4;

1,6-dihydro-6 iminopurine

Product Description

Appearance: White powder, occasionally with a yellow cast.

Molecular formula: $C_5H_5N_5$ Molecular weight: 135.1

 $E^{mM}(263nm) = 13.2 (1.0 M HCI)$

This product is synthetic; our supplier considers details proprietary. A method of synthesis of C14-labeled adenine and 8-azaadenine was developed due to interest as a possible anti-cancer agent.

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.

Preparation Instructions

BBI tests adenine in 1 M HCl at 20 mg/mL, obtaining a clear colorless solution. (Note that the hydrochloride salt is directly water-soluble.)

Adenine is soluble in at 1 part to ~2000 parts cold water, 1 part in 40 of boiling water; slightly soluble in hot alcohol; insoluble in chloroform, ether; soluble in hot NH4OH.

Solutions should be stable for months if sterile-filtered and stored at 2-8 °C.

Storage/Stability

When stored at room temperature, adenine has a shelflife of four years.

Product Profile

Column: Vydac C18 15 cm x 4.6 mm, particle size 5 µm				
Mobile phases:	Time:	0	5	25
A 0.05 M (NH4)H2PO4		100	100	20%
B Acetonitrile		0	0	80%



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Pressure: 1270 psi Flow rate: 1 mL/min

Sample: Dissolved at 0.20 mg/mL in 0.5 M HCl; 30 μ L injected

Detection: 265 nm

Retention time: ~9 minutes