3050 Spruce Street, Saint Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Adenosine

Product Number A9251 Storage Temperature 2-8 °C

Product Description

Molecular Formula: C₁₀H₁₃N₅O₄ Molecular Weight: 267.2 CAS Number: 58-61-7

Specific Rotation: -61.7° (7 mg/100 ml water)¹ pK_a: 3.5 and 12.5.²

Extinction Coefficient: E^{mM} = 15.4 (259 nm in

0.01 M PO₄, pH 7)³

Adenosine is a nucleoside, a purine riboside widely distributed in nature. Adenosine is the product of the degradation of AMP.

Precautions and Disclaimer

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

Preparation Instructions Soluble in water (7 mg/ml).1

Storage/Stability

Adenosine readily hydrolyzes in dilute mineral acids to adenine and D-ribose. Nitrous acid causes deamination.²

References

- 1. The Merck Index, 11th ed., Entry# 143
- Dawson, R.M. C., et al., Data for Biochemical Research, 3rd ed., p. 77., Oxford University Press, New York, (1986).
- Specifications and Criteria for Biochemical Compounds, 3rd ed., p. 157.

MES/ 8/08