

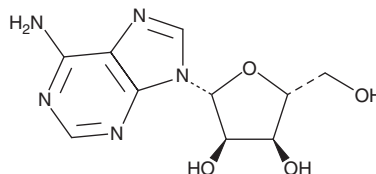
# PRODUCT INFORMATION



## Adenosine

Item No. 21232

**CAS Registry No.:** 58-61-7  
**Formal Name:** 2R-(6-amino-9H-purin-9-yl)-5R-(hydroxymethyl)tetrahydrofuran-3R,4S-diol  
**Synonym:** NSC 7652  
**MF:** C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub>  
**FW:** 267.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 259 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Adenosine is supplied as a crystalline solid. A stock solution may be made by dissolving the adenosine in the solvent of choice, which should be purged with an inert gas. Adenosine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of adenosine in these solvents is approximately 20 and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of adenosine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of adenosine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Adenosine is a purine nucleoside composed of adenine and ribose linked by a glycosidic linkage. It is an endogenous ligand of a family of four adenosine receptors, which serve diverse roles related to smooth muscle tone, central nervous system regulation, and cardiac function. Adenosine is a precursor for adenosine 5'-monophosphate (Item No. 21094), adenosine 5'-diphosphate (Item Nos. 16778 | 21121), adenosine 5'-triphosphate (Item No. 14498), and cyclic AMP (Item No. 18820).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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