

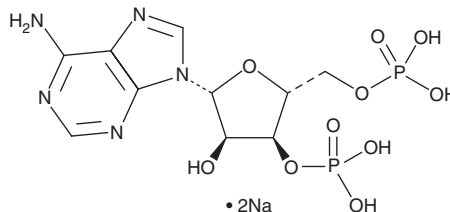
# PRODUCT INFORMATION



## Adenosine 3',5'-diphosphate (sodium salt)

Item No. 24265

**CAS Registry No.:** 75431-54-8  
**Formal Name:** 3'-adenylic acid, 5'-(dihydrogen phosphate), disodium salt  
**Synonyms:** Adenosine 3',5'-bisphosphate, 3',5'-ADP, 3'-Phosphoadenosine 5'-phosphate  
**MF:**  $C_{10}H_{15}N_5O_{10}P_2 \cdot 2Na$   
**FW:** 473.2  
**Purity:**  $\geq 95\%$   
**UV/Vis.:**  $\lambda_{max}$ : 260 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Adenosine 3',5'-diphosphate (sodium salt) is supplied as a crystalline solid. Aqueous solutions of adenosine 3',5'-diphosphate (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of adenosine 3',5'-diphosphate (sodium salt) 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 3',5'-diphosphate is an adenine nucleotide containing a phosphate group at the 3' and 5' positions of the pentose sugar ribose. It is a product of 3'-phosphoadenosine 5'-phosphosulfonate (PAPS), a cofactor of sulfotransferases (SULTs), and has been used to study the kinetic properties and structure of SULTs.<sup>1,2</sup>

### References

1. Dombrowski, L., Dong, A., Bochkarev, A., *et al.* Crystal structures of human sulfotransferases SULT1B1 and SULT1C1 complexed with the cofactor product adenosine-3'- 5'-diphosphate (PAP). *Proteins* **64**(4), 1091-1094 (2006).
2. Tibbs, Z.E., Rohn-Glowacki, K.J., Crittenden, F., *et al.* Structural plasticity in the human cytosolic sulfotransferase dimer and its role in substrate selectivity and catalysis. *Drug Metab. Pharmacokinet.* **30**(1), 3-20 (2015).

#### 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

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