# **PRODUCT** INFORMATION



## Adenosine 5'-triphosphate (sodium salt)

Item No. 14498

CAS Registry No.:	987-65-5		
Formal Name:	adenosine 5'-(tetrahydrogen		
	triphosphate), disodium salt		
Synonyms:	5'-ATP, ATP, NSC 20268		
MF:	C <sub>10</sub> H <sub>14</sub> N <sub>5</sub> O <sub>13</sub> P <sub>3</sub> ● 2Na		
FW:	551.1		ЭΗ
Purity:	≥95%	•2Na+	
UV/Vis.:	λ <sub>max</sub> : 258 nm	HO OH	
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 5'-triphosphate (ATP) (sodium salt) is supplied as a crystalline solid. Aqueous solutions of ATP (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ATP (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

ATP is a central component of energy storage and metabolism in vivo, providing the metabolic energy to drive metabolic pumps and serving as a coenzyme in a wide array of enzymatic reactions.<sup>1</sup> ATP is a substrate for kinases involved in cell signaling and of adenylate cyclases that produce the second messenger cAMP.<sup>1</sup> It is utilized in various cellular processes including, respiration, biosynthetic reactions, motility, and cell division.

#### Reference

1. Knowles, J.R. Enzyme-catalyzed phosphoryl transfer reactions. Annu. Rev. Biochem. 49, 877-919 (1980).

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.

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