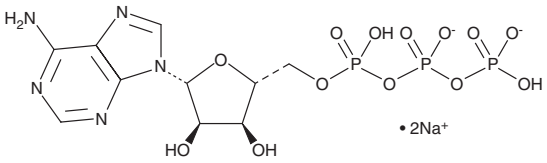
PRODUCT INFORMATION

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: $C_{10}H_{14}N_5O_{13}P_3 \bullet 2Na$
FW: 551.1
Purity: ≥95%
UV/Vis.: λ_{max}: 258 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 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.[1] ATP is a substrate for kinases involved in cell signaling and of adenylate cyclases that produce the second messenger cAMP.[1] 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).

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