

Adenosine 5'-triphosphate (ATP) Disodium Salt

Cat. No. NATE-0945

Lot. No. (See product label)

Introduction

Description

Adenosine-5'-triphosphate is a nucleoside triphosphate used in cells as a coenzyme. It is often called the "molecular unit of currency" of intracellular energy transfer. ATP transports chemical energy within cells for metabolism. It is one of the end products of photophosphorylation, cellular respiration, and fermentation and used by enzymes and structural proteins in many cellular processes, including biosynthetic reactions, motility, and cell division. One molecule of ATP contains three phosphate groups, and it is produced by a wide variety of enzymes, including ATP synthase, from adenosine diphosphate (ADP) or adenosine monophosphate (AMP) and various phosphate group donors. Substrate level phosphorylation, oxidative phosphorylation in cellular respiration, and photophosphorylation in photosynthesis are three major mechanisms of ATP biosynthesis.

Synonyms

ATP; ATP-Na₂; ATP-II; ATP-2

Product Information

Form

Crystalline

CAS No.

56-65-5

Molecular Weight

551.2

Purity

> 95% (Enzymatic)

Contaminants

PK: < 1.0% MK: < 1.0% LDH: < 1.0%

Structure

C₁₀H₁₄N₅O₁₃P₃ - Na₂

Storage and Shipping Information

Storage

Store at -20°C