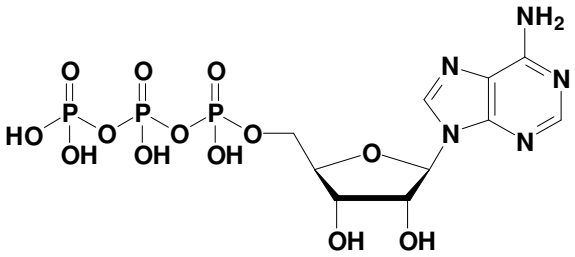
Data sheet

IFTA AG
Certified QMS according to
DIN EN ISO 9001
Reg. No. IC 03214 034

Jena Bioscience

ATP, solution
Adenosine 5'-triphosphate, sodium salt
100 mM

Cat. No.	Amount
NU-1010	1 ml (100 μmol)



For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C, short term (up to one week) exposure to ambient temperature possible

Concentration
100 mM +/-2%

Form
clear aqueous solution, pH 8.0 +/-0.2 (4°C)

Purity
>99%

Molecular Formula
$C_{10}H_{13}N_5O_{13}P_3$ (Anion)
Molecular Weight
504.16 (Anion)

Absorbance
absorbance max: 259 nm (pH 7)
ϵ at absorbance max: 15.1 $mmol^{-1}$ cm^{-1}

Quality Control Specifications
in vitro transcription:
suitable
contamination with bacterial and human DNA:
not detectable
activity of DNase, Protease or Phosphatase:
not detectable

Description
Ultrapure ATP supplied as clear aqueous solution (pH 8.0).

Applications:

ATP-sensitive calcium channels[1]

V-ATPases (cellular proton pumps)[2]

ATP-coupled chromatin remodelling[3]

ATP-binding cassette transporters[4]

ATP-grasp enzymes[5]

Selected References:

[1] Wang *et al.* (2011) The biological effect of endogenous sulfur dioxide in the cardiovascular system. *Eur. J. Pharmacol.* **670(1)**:1.

[2] Scott *et al.* (2011) Duelling functions of the V-ATPase. *EMBO J.* **30(20)**:4113.

[3] Erdel *et al.* (2011) Chromatin remodelling in mammalian cells by ISWI-type complexes–where, when and why? *FEBS J.* **278(19)**:3608.

[4] Gatti *et al.* (2011) Novel insights into targeting ATP-binding cassette transporters for antitumor therapy. *Curr. Med. Chem.* **18(27)**:4237.

[5] Fawaz *et al.* (2011) The ATP-grasp enzymes. *Bioorg. Chem.* **39(5-6)**:185.

Erlich et al. (1988) Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. *Science* **29 (239)**:487.
Gelfand et al. (1991) Detection of specific polymerase chain reaction product by utilizing the 5'- 3' exonuclease activity of Thermus aquaticus DNA polymerase. *Proc. Natl. Acad. Sci. USA* **88 (16)**:7276.
Sanger et al. (1977) DNA sequencing with chain-terminating inhibitors. *Proc. Natl. Acad. Sci. USA* **74**:5463.