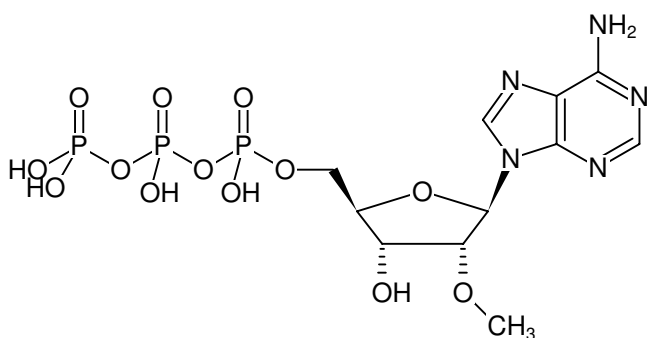


**2'OMe-ATP**

2'-O-Methyladenosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1184S	50 µl (100 mM)
NU-1184L	5 x 50 µl (100 mM)



Structural formula of 2'OMe-ATP

For general laboratory use.**Shipping:** shipped on gel packs**Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery**Molecular Formula:** C₁₁H₁₈N₅O₁₃P₃ (free acid)**Molecular Weight:** 521.21 g/mol (free acid)**Exact Mass:** 521.01 g/mol (free acid)**Purity:** ≥ 95 % (HPLC)**Form:** solution in water**Color:** colorless to slightly yellow**Concentration:** 100 mM - 110 mM**pH:** 7.5 ±0.5**Spectroscopic Properties:** λ_{max} 259 nm, ε 15.1 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.0)**Applications:**Acidity constants^[1]Inhibition of RNA polymerase^[2]Sequence specific incorporation by RNase P^[3]Nucleotide specificity of CCA-adding enzyme^[4]**Selected References:**

[1] Astroem *et al.* (2004) Acidity of secondary hydroxyls in ATP and adenosine analogues and the question of 2,3-hydrogen bond in ribonucleosides. *J. Am. Chem. Soc.* **126** (45):14710.

[2] Aivazashvili *et al.* (1977) ATP analogs in the RNA-polymerase reaction. *Molekularnaya Biologiya (Moscow)* **11** (4):854.

[3] Conrad *et al.* (1995) Enzymatic synthesis of 2-modified nucleic acids: identification of important phosphate and ribose moieties in RNase P substrates. *Nucleic Acids Res.* **23** (11):1845.

[4] Vaish *et al.* (2003) A novel, modification-dependent ATP-binding aptamer selected from an RNA library incorporating a cationic functionality. *Biochemistry* **42** (29):8842.

Fa *et al.* (2004) Expanding the substrate repertoire of a DNA polymerase by directed evolution. *J. Am. Chem. Soc.* **126** (6):1748.

Cho *et al.* (2003) Use of nucleotide analogs by class I and class II CCA-adding enzymes (tRNA nucleotidyltransferase): deciphering the basis for nucleotide selection. *RNA* **9** (8):970.