DATA SHEET

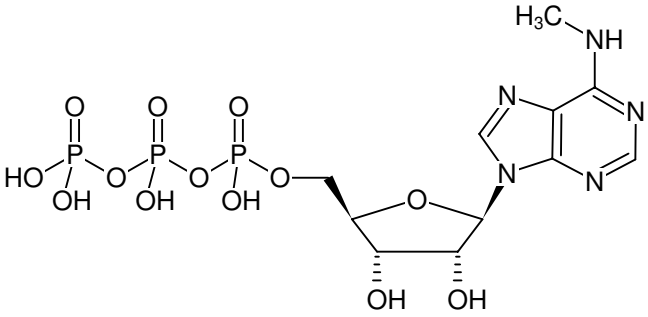
Jena Bioscience

N^6-Methyl-ATP

m^6ATP

N^6-Methyl-adenosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1101S	10 µl (100 mM)
NU-1101L	5 x 10 µl (100 mM)



Structural formula of N^6-Methyl-ATP

For research use only!

Shipping: shipped on blue ice

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: $C_{11}H_{18}N_5O_{13}P_3$ (free acid)

Molecular Weight: 521.21 g/mol (free acid)

Exact Mass: 521.01 g/mol (free acid)

CAS#: 3130-39-0 (acid)

Purity: ≥ 95 % (HPLC)

Form: clear aqueous solution

Concentration: 100 mM - 110 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 265 nm, ε 18.5 L $mmol^{-1}$ cm^{-1} (Tris-HCl pH 7.5)

Applications:
Agonistic ligand, mainly for nucleoside receptor A_1, with less affinity to A_{2A} and A_3
Nucleoside-triphosphates can be converted by different membrane-bound phosphatases into nucleosides acting as nucleoside receptor ligands. In some cases nucleoside phosphates act also directly on nucleoside receptors.

Specific Ligands:

Agonist for P2Y receptor[1] and for $P2X_2$ purinoreceptor[2,3]

Related Products:
HighYield T7 RNA Synthesis Kit, #RNT-101

Selected References:

[1] Brunstock *et al.* (1994) Structure activity relationships for derivatives of adenosine-5'-triphosphate as agonists at P2 purinoreceptors: heterogeneity within P2X and P2Y subtypes. *Drug Dev. Res.* **31 (3)**:206.

[2] Bo *et al.* (1994) Comparative studies on affinities of ATP derivatives for P2X-purinoreceptors in rat urinary bladder. *Br. J. Pharmacol.* **112 (4)**:1151.

[3] He *et al.* (2002) Purinergic P2X (2) receptor desensitization depends on coupling between ectodomain and C-terminal domain. *Molec. Pharmac.* **62 (5)**:1187.