DATA SHEET

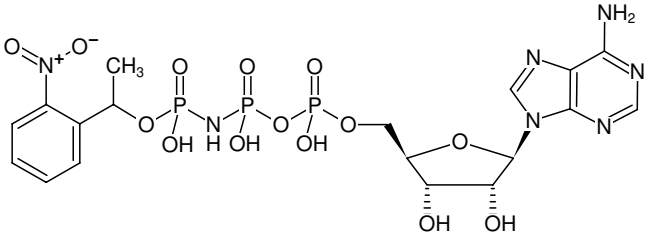
Jena Bioscience

NPE-caged-AppNHp

(NPE-caged-AMPPNP)

Adenosine-5'-[(β,γ)-imido]triphosphate, P^3-(1-(2-nitrophenyl)-ethyl)-ester, Triethylammonium salt

Cat. No.	Amount
NU-305S	20 µl (10 mM)
NU-305L	5 x 20 µl (10 mM)



Structural formula of NPE-caged-AppNHp

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: store dark

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

Shelf Life: 6 months after date of delivery

Molecular Formula: $C_{18}H_{24}N_7O_{14}P_3$ (free acid)

Molecular Weight: 655.35 g/mol (free acid)

Exact Mass: 655.06 g/mol (free acid)

CAS#: 116271-21-7

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: colorless to slightly yellow

Concentration: 10 mM - 11 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 260 nm, ε 18.0 L $mmol^{-1}$ cm^{-1} (Tris-HCl pH 7.5)

Applications:
Agonistic ligand, mainly for nucleoside receptor A_1
Nucleosidephosphates stabilized against hydrolytic degradation can directly bind to nucleoside receptors. The caged form is protected during uptake and transport in animal experiments and can be well-directed released through activation at the target tissue.

Selected References:

Volonte *et al.* (2009) Membrane components and purinergic signalling: the purinome, a complex interplay among ligands, degrading enzymes, receptors and transporters. *FEBS J.* **276**:318.

Yegutkin (2008) Nucleotide and nucleoside converting enzymes: Important modulators of purinergic signalling cascade. *Biochim. Biophys. Acta* **1783**:673.

Williams *et al.* (1986) Effects of purine nucleotides on the binding of [3H]cyclopentyladenosine to adenosine A1-receptors in rat brain membranes. *J. Neurochem.* **47 (1)**:88.