DATA SHEET

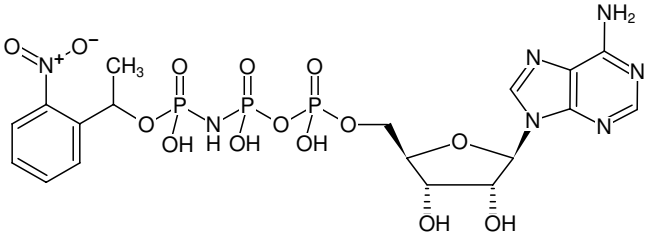
Jena Bioscience

# 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 research use only!***

**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:** $\lambda_{max}$ 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.