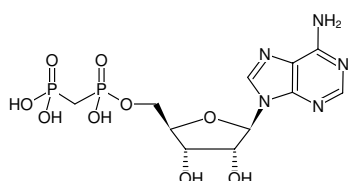


**ApCp**

(AMPCP)

Adenosine-5'-[(α,β)-methylene]diphosphate, Sodium salt

Cat. No.	Amount
NU-420-5	5 mg
NU-420-25	25 mg



Structural formula of ApCp

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:** C₁₁H₁₇N₅O₉P₂ (free acid)**Molecular Weight:** 425.23 g/mol (free acid)**Exact Mass:** 425.05 g/mol (free acid)**CAS#:** 3768-14-7**Purity:** ≥ 98 % (HPLC)**Form:** solid**Color:** white to off-white**Spectroscopic Properties:** λ_{\max} 259 nm, ϵ 15.4 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**X-ray studies with selenophosphate synthetase 1^[1]Inhibition of ecto phosphodiesterase DPSPX and ecto nucleosidase AMPCP^[2]Inhibition of 5'-nucleotidase^[3]Agonistic ligand, mainly for nucleoside receptor A₁
Nucleosidephosphates stabilized against hydrolytic degradation can directly bind to nucleoside receptors.**Selected References:**[1] Wang *et al.* (2009) Crystal structures of catalytic intermediates of human selenophosphate synthetase 1. *J. Mol. Biol.* **390** (4):747.[2] Chiavegatti *et al.* (2008) Skeletal muscle expresses the extracellular cyclic AMP-adenosine pathway. *Br. J. Pharmacol.* **153** (6):1331.[3] Müller *et al.* (2008) Inhibition of lipolysis by palmitate, H₂O₂ and the sulfonylurea drug, glimepiride, in rat adipocytes depends on cAMP degradation by lipid droplets. *Biochemistry* **47** (5):1259.Panther *et al.* (2012) AMP affects intracellular Ca²⁺ signaling, cytokine secretion and T-cell priming capacity of dendritic cells. *PLoS One* **7** (5):e37560.Cometti *et al.* (2003) Oviduct cells express the cyclic AMP-adenosine pathway. *Biol. Reprod.* **69** (3):868.Park *et al.* (1999) Differential effects of adenine nucleotide analogues on shape change and aggregation induced by adenosine 5-diphosphate (ADP) in human platelets. *Br. J. Pharmacol.* **127** (6):1359.Ragazzi *et al.* (1991) Electrophysiological and receptor binding studies to assess activation of the cardiac adenosine receptor by adenine nucleotides. *Circulation Res.* **68** (4):1035.