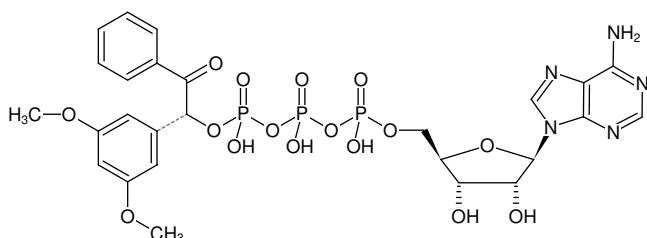


**DMB-caged-ATP**Adenosine-5'-triphosphate, P³-(1-(3',5'-dimethoxyphenyl)-2-oxo-2-phenyl-ethyl)-ester, Triethylammonium salt

Cat. No.	Amount
NU-309S	10 µl (10 mM)
NU-309L	5 x 10 µl (10 mM)



Structural formula of DMB-caged-ATP

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: 12 months after date of delivery**Molecular Formula:** C₂₆H₃₀N₅O₁₆P₃ (free acid)**Molecular Weight:** 761.46 g/mol (free acid)**Exact Mass:** 761.09 g/mol (free acid)**CAS#:** 159899-51-1**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} 256 nm, ε 25.6 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:****Ligand for purinergic receptors:**

The nucleotide can be transported extra- or intracellular in a protected form to the target. After activation by well-defined conditions the liberated ATP can interact with P2X- and P2Y-receptors. Interacting subreceptor types and corresponding references are listed in Data sheet #NU-1010.

Agonistic ligand, mainly for nucleoside receptor A₁

Nucleoside-triphosphates can be converted by different membrane-bound phosphatases into nucleosides acting as nucleoside receptor ligands. 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:

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Sokolov *et al.* (1998) Fast transient currents in Na,K-ATPase induced by ATP concentration jumps from the P-3-[1-(3',5'-dimethoxyphenyl)-2-oxo]ethyl ester of ATP. *Biophys. J.* **74** (5):2285.

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Thirlwell *et al.* (1994) Kinetics of relaxation from rigor of permeabilized fast-twitch skeletal fibers from the rabbit using a novel caged-ATP and apyrase. *Biophys. J.* **67** (6):2436.

Corrie *et al.* (1992) Synthetic, mechanistic and photochemical studies of phosphate-esters of substituted benzoines. *J. Chem. Soc. Perkin Trans.* **1** (18):2409.

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