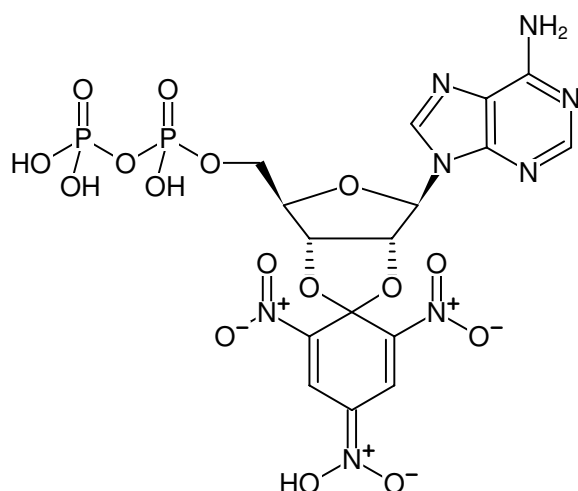


**TNP-ADP**

2',3'-O-Trinitrophenyl-adenosine-5'-diphosphate, Triethylammonium salt

Cat. No.	Amount
NU-222S	1 μmol
NU-222L	5 x 1 μmol



Structural formula of TNP-ADP

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:** C₁₆H₁₆N₈O₁₆P₂**Molecular Weight:** 638.28 g/mol**Exact Mass:** 638.01 g/mol**CAS#:** 77450-67-0**Purity:** \geq 95 % (HPLC)**Form:** solid**Color:** orange**Spectroscopic Properties:** λ_{max} 259/408/470 nm, ϵ 25.0/26.4/18.5 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5), λ_{exc} 408/470 nm, λ_{em} 552 nm**Selected References:**Sprang *et al.* (2006) Broad Specificity of Mammalian Adenylyl Cyclase for Interaction with 2',3'-Substituted Purine- and Pyrimidine Nucleotide Inhibitors. *Mol. Pharmacol.* **70**:878.Qu *et al.* (2003) Stoichiometry and Affinity of Nucleotide Binding to P-Glycoprotein during the Catalytic Cycle. *Biochemistry* **42**:1170.Plesniak *et al.* (2002) Probing the nucleotide binding domain of the osmoregulator EnvZ using fluorescent nucleotide derivatives. *Biochemistry* **41**:13876.Hirschman *et al.* (2001) Active site mutations in CheA, the signal-transducing protein kinase of the chemotaxis system in *Escherichia coli*. *Biochemistry* **40**:13876.Galletto *et al.* (2000) Interactions of nucleotide cofactors with the *Escherichia coli* replication factor DnaC protein. *Biochemistry* **39**:12959.Weber *et al.* (1997) Binding of TNP-ATP and TNP-ADP to the non-catalytic sites of *Escherichia coli* F1-ATPase. *FEBS Lett.* **412**:169.Thomas *et al.* (1991) Cystic fibrosis transmembrane conductance regulator: nucleotide binding to a synthetic peptide. *Science* **251**:555.Kormer *et al.* (1982) Using 2' (or 3')-O-trinitrophenyl derivatives of adenine nucleotides to study the structure and mechanism of functioning of soluble mitochondrial ATPase. *Eur. J. Biochem.* **121**:451.Schafer *et al.* (1982) Interaction of high-affinity nucleotide binding sites in mitochondrial ATP synthesis and hydrolysis. *Bioenerg. Biomembr.* **14**:479.Tao *et al.* (1981) Excitation energy transfer studies on the proximity between SH1 and the adenosinetriphosphatase site in myosin subfragment 1. *Biochemistry* **20**:5051.Hiratsuka *et al.* (1977) Heterogeneous reaction of heavy meromyosin ATPase with 2' (or 3')-O-(2,4,6-trinitrophenyl)adenosine 5'-5'-triphosphate. *J. Biochem. (Tokyo)* **82**:575.