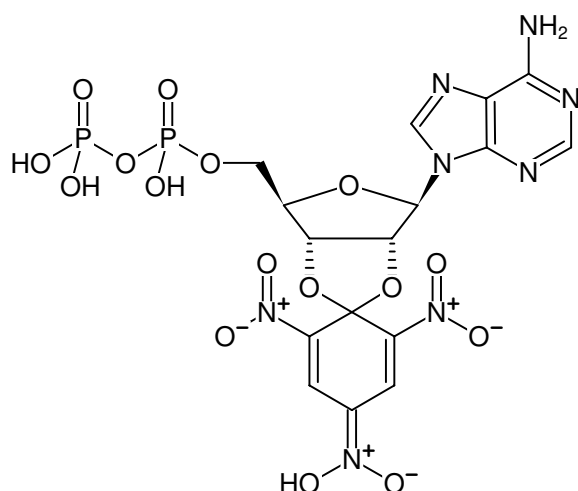


**TNP-ADP**

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

Cat. No.	Amount
NU-222S	1 $\mu$ mol
NU-222L	5 x 1 $\mu$ mol



Structural formula of TNP-ADP

**For research use only!****Shipping:** shipped on blue ice**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:** C<sub>16</sub>H<sub>16</sub>N<sub>8</sub>O<sub>16</sub>P<sub>2</sub>**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:**  $\lambda_{\max}$  259/408/470 nm,  $\epsilon$  25.0/26.4/18.5 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5),  $\lambda_{\text{exc}}$  408/470 nm,  $\lambda_{\text{em}}$  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.