

**Product Name:** TNP-ATP triethylammonium salt

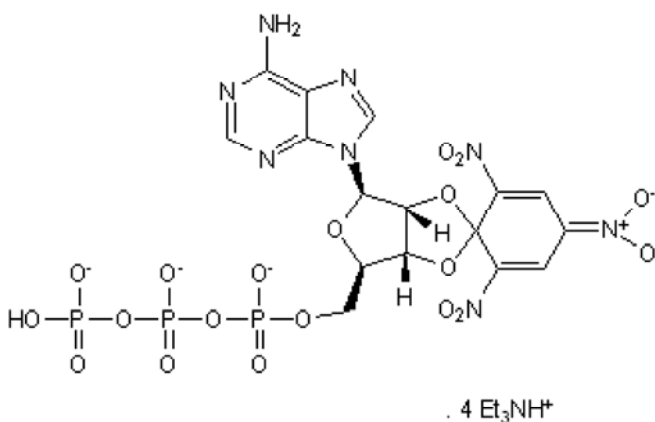
**Catalog No.:** 2464

**Batch No.:** 13

**IUPAC Name:** 2',3'-O-(2,4,6-Trinitrophenyl)adenosine-5'-triphosphate tetra(triethylammonium) salt

## 1. PHYSICAL AND CHEMICAL PROPERTIES

<b>Batch Molecular Formula:</b>	C <sub>16</sub> H <sub>13</sub> N <sub>8</sub> O <sub>19</sub> P <sub>3</sub> .4C <sub>6</sub> H <sub>16</sub> N
<b>Batch Molecular Weight:</b>	1123.04
<b>Physical Appearance:</b>	Orange liquid
<b>Solubility:</b>	Soluble in water (supplied pre-dissolved at a concentration of 10mM)
<b>Storage:</b>	Store at -20°C
<b>Batch Molecular Structure:</b>	



## 2. ANALYTICAL DATA

<b>HPLC:</b>	Shows 98.7% purity
<b>Mass Spectrum:</b>	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**13**

**IUPAC Name:** 2',3'-O-(2,4,6-Trinitrophenyl)adenosine-5'-triphosphate tetra(triethylammonium) salt

**Description:**

TNP-ATP triethylammonium salt is a high affinity, selective P2X receptor antagonist. Inhibits ATP-induced currents in cells expressing P2X<sub>1</sub>, P2X<sub>3</sub> and heteromeric P2X<sub>2/3</sub> receptors with IC<sub>50</sub> values of 6, 0.9 and 7 nM respectively. Displays 1000-fold selectivity over P2X<sub>2</sub>, P2X<sub>4</sub> and P2X<sub>7</sub>.

**Physical and Chemical Properties:**

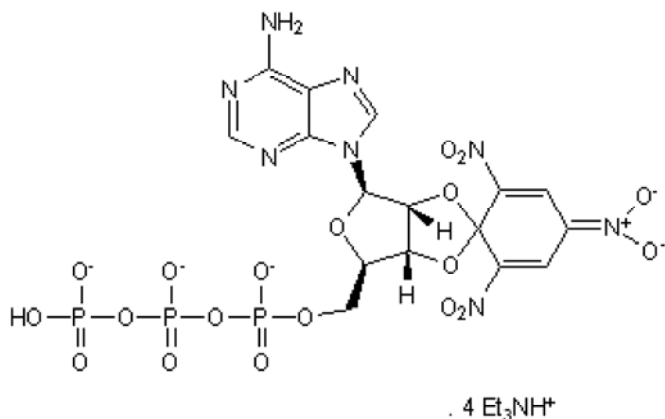
Batch Molecular Formula: C<sub>16</sub>H<sub>13</sub>N<sub>8</sub>O<sub>19</sub>P<sub>3</sub>.4C<sub>6</sub>H<sub>16</sub>N

Batch Molecular Weight: 1123.04

Physical Appearance: Orange liquid

**Minimum Purity:** ≥95%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

Soluble in water (supplied pre-dissolved at a concentration of 10mM)

This product is supplied dissolved in water at a concentration of 10 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Spelta et al** (2002) Kinetics of antagonist actions at rat P2X<sub>2/3</sub> heteromeric receptors. *Br.J.Pharmacol.* **135** 1524. PMID: 11906966 .

**Burgard et al** (2000) Competitive antagonism of recombinant P2X<sub>(2/3)</sub> receptors by 2', 3'-O-(2,4,6-trinitrophenyl) adenosine 5'-triphosphate (TNP-ATP). *Mol.Pharmacol.* **58** 1502. PMID: 11093790.

**Lewis et al** (1998) 2',3'-O-(2,4,6-trinitrophenyl) adenosine 5'-triphosphate (TNP-ATP) - a nanomolar affinity antagonist at rat mesenteric artery P2X receptor ion channels. *Br.J.Pharmacol.* **124** 1463. PMID: 9723959.

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