Certificate of Analysis

 $C_{16}H_{13}N_8O_{19}P_3.4C_6H_{16}N$

Product Name: TNP-ATP triethylammonium salt

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:

Batch Molecular Weight: Physical Appearance:

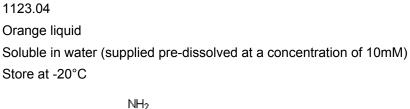
Пузісаі Аррсаі

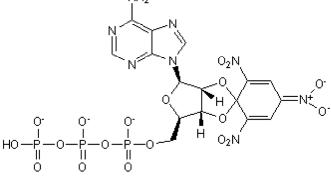
bio-techne[®]

TOCRIS

Solubility: Storage: Soluble in v

Batch Molecular Structure:





. 4 Et₃NH⁺

Catalog No.: 2464

2. ANALYTICAL DATA

HPLC: Mass Spectrum: Shows 98.7 % purity Consistent with structure

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

bio-techne.comNorth AmericaChinaEurope Middle East AfricaRest of Worldinfo@bio-techne.comTel: (800) 343 7475info.cn@bio-techne.comTel: +44 (0)1235 529449www.tocris.com/distributorstechsupport@bio-techne.comTel: +86 (21) 52380373Tel: +44 (0)1235 529449tel: +1 612 379 2956

Batch No.: 14

www.tocris.com

Print Date: Sep 5th 2023

Product Information

Product Name: TNP-ATP triethylammonium salt

IUPAC Name:

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

Description:

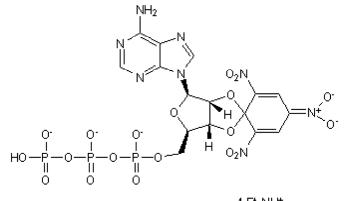
TNP-ATP triethylammonium salt is a high affinity, selective P2X receptor antagonist. Inhibits ATP-induced currents in cells expressing P2X₁, P2X₃ and heteromeric P2X_{2/3} receptors with IC₅₀ values of 6, 0.9 and 7 nM respectively. Displays 1000-fold selectivity over P2X₂, P2X₄ and P2X₇.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₆H₁₃N₈O₁₉P₃.4C₆H₁₆N Batch Molecular Weight: 1123.04 Physical Appearance: Orange liquid

Minimum Purity: ≥95%

Batch Molecular Structure:



. 4 Et₃NH⁺

References:

Spelta *et al* (2002) Kinetics of antagonist actions at rat $P2X_{2/3}$ heteromeric receptors. Br.J.Pharmacol. **135** 1524. PMID: 11906966 . **Burgard** *et al* (2000) Competitive antagonism of recombinant $P2X_{(2/3)}$ 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.

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956

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.

Catalog No.: 2464

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 $\ensuremath{\mathsf{mM}}$

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

www.tocris.com

14

biotechne[®]