

**Product Name:** 2-Methylthioadenosine diphosphate trisodium salt

**Catalog No.:** 1624

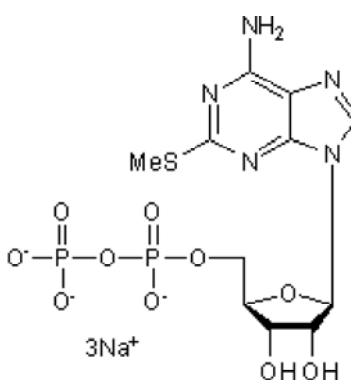
**Batch No.:** 12

CAS Number: 475193-31-8

IUPAC Name: 2-(Methylthio)adenosine-5'-(trihydrogen diphosphate) trisodium salt

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>11</sub>H<sub>14</sub>N<sub>5</sub>Na<sub>3</sub>O<sub>10</sub>P<sub>2</sub>S  
**Batch Molecular Weight:** 539.24  
**Physical Appearance:** Colourless solution  
**Solubility:** Soluble in water (supplied pre-dissolved at a concentration of 10mM)  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.4% purity  
**Mass Spectrum:** Consistent with structure

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

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**CAS Number:** 475193-31-8  
**IUPAC Name:** 2-(Methylthio)adenosine-5'-(trihydrogen diphosphate) trisodium salt

**Description:**

Potent purinergic agonist displaying selectivity for P2Y<sub>1</sub>, P2Y<sub>12</sub> and P2Y<sub>13</sub> receptors (pEC<sub>50</sub> = 8.29 and 9.05 for P2Y<sub>1</sub> and P2Y<sub>12</sub>, EC<sub>50</sub> = 19 nM for P2Y<sub>13</sub>). Induces aggregation of, and inhibits cAMP accumulation in, platelets in vitro.

**Physical and Chemical Properties:**

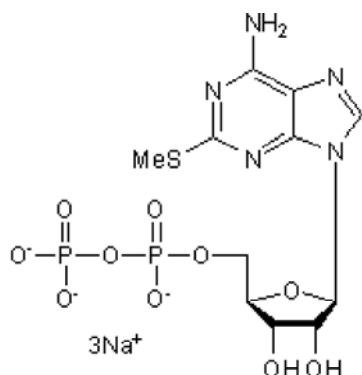
Batch Molecular Formula: C<sub>11</sub>H<sub>14</sub>N<sub>5</sub>Na<sub>3</sub>O<sub>10</sub>P<sub>2</sub>S

Batch Molecular Weight: 539.24

Physical Appearance: Colourless solution

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**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 10mM

**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:**

**Sak and Webb** (2002) A retrospective of recombinant P2Y receptor subtypes and their pharmacology. *Arch.Biochem.Biophys.* **397** 131. PMID: 11747319.

**Zhang et al** (2002) P2Y<sub>13</sub>: identification and characterization of a novel Gai-coupled ADP receptor from human and mouse. *J.Pharmacol.Exp.Ther.* **301** 705. PMID: 11961076.

**Macfarlane et al** (1983) 2-Methylthioadenosine[β-<sup>32</sup>P]diphosphate. An agonist and radioligand for the receptor that inhibits the accumulation of cyclic AMP in intact blood platelets. *J.Clin.Invest.* **71** 420. PMID: 6298277.

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