

Certificate of Analysis

www.tocris.com

Product Name: MRS 2179 tetrasodium salt

Catalog No.: 0900

Batch No.: 8

CAS Number: 1454889-37-2

IUPAC Name: 2'-Deoxy-*N*⁶-methyladenosine 3',5'-bisphosphate tetrasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₃N₅O₉P₂Na₄·3½H₂O

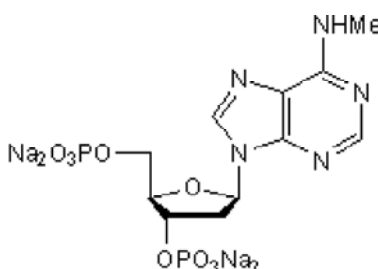
Batch Molecular Weight: 576.21

Physical Appearance: White solid

Solubility: water to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	22.93	3.5	12.15
Found	22.88	3.76	11.97

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: MRS 2179 tetrasodium salt

Catalog No.: 0900

8

CAS Number: 1454889-37-2

IUPAC Name: 2'-Deoxy-*N*⁶-methyladenosine 3',5'-bisphosphate tetrasodium salt

Description:

MRS 2179 tetrasodium salt is a competitive antagonist at P2Y₁ receptors ($K_B = 100$ nM). Selective over P2X₁ ($IC_{50} = 1.15$ μ M), P2X₃ ($IC_{50} = 12.9$ μ M), P2X₂, P2X₄, P2Y₂, P2Y₄ and P2Y₆ receptors. Inhibits the upregulation of NTPDase1 by ATP γ S.

Physical and Chemical Properties:

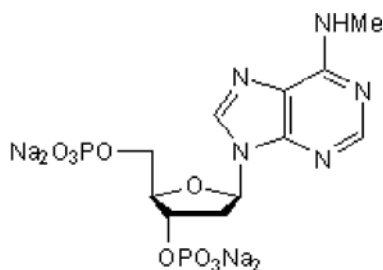
Batch Molecular Formula: C₁₁H₁₃N₅O₉P₂Na₄·3½H₂O

Batch Molecular Weight: 576.21

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

Solubility & Usage Info:

water to 50 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:

Lu *et al* (2007) Stimulation of the P2Y₁ receptor up-regulates nucleoside-triphosphate diphosphohydrolase-1 in human retinal pigment epithelial cells. *J.Pharmacol.Exp.Ther.* **323** 157. PMID: 17626796.

Brown *et al* (2000) Activity of novel adenine nucleotide derivatives as agonists and antagonists at recombinant rat P2X receptors. *Drug Dev.Res.* **49** 253. PMID: 22791931.

Nandanan *et al* (2000) Synthesis, biological activity, and molecular modeling of ribose-modified deoxyadenosine bisphosphate analogues as P2Y₁ receptor ligands. *J.Med.Chem.* **43** 829. PMID: 10715151.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956