

Certificate of Analysis

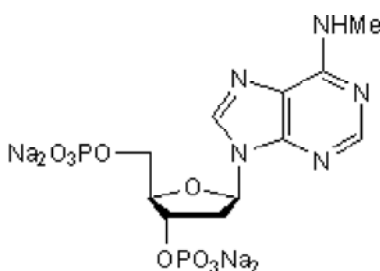
www.tocris.com

Product Name: MRS 2179 tetrasodium salt
CAS Number: 1454889-37-2
IUPAC Name: 2'-Deoxy-*N*⁶-methyladenosine 3',5'-bisphosphate tetrasodium salt

Catalog No.: 0900 **Batch No.:** 10

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₃N₅O₉P₂Na₄·3.75H₂O
Batch Molecular Weight: 580.72
Physical Appearance: White solid
Solubility: water to 50 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Sodium
Theoretical	22.75	3.56	12.06	
Found	23.02	4.07	12.02	

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

Product Name:	MRS 2179 tetrasodium salt	Catalog No.:	0900	10
CAS Number:	1454889-37-2			
IUPAC Name:	2'-Deoxy- <i>N</i> 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 (IC₅₀ = 1.15 μM), P2X₃ (IC₅₀ = 12.9 μM), P2X₂, P2X₄, P2Y₂, P2Y₄ and P2Y₆ receptors. Inhibits the upregulation of NTPDase1 by ATPγS.

Physical and Chemical Properties:

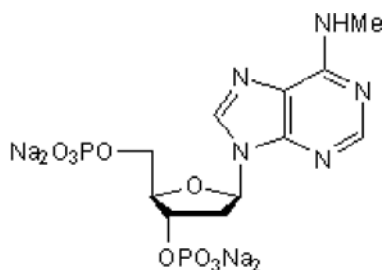
Batch Molecular Formula: C₁₁H₁₃N₅O₉P₂Na₄·3.75H₂O

Batch Molecular Weight: 580.72

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



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.

Nandan 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.

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.

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