

Product Name: 8-MDP

Catalog No.: 4588

Batch No.: 1

CAS Number: 29491-75-6

IUPAC Name: 2,2',2'',2'''-[4,8-Bis(hexahydro-1(2H)-azocinyl)pyrimido[5,4-d]pyrimidine-2,6-diyl]dinitrilo]tetrakisethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₄₈N₈O₄·¼H₂O

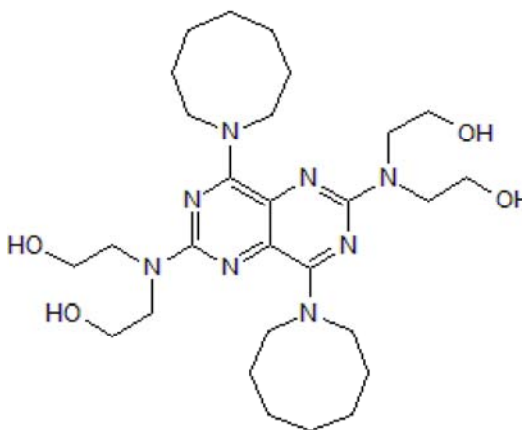
Batch Molecular Weight: 565.23

Physical Appearance: Yellow solid

Solubility: DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.23 (Acetone:Petrol [7:3])

HPLC: Shows 97.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	59.5	8.65	19.82
Found	59.53	8.66	19.97

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: 8-MDP

Catalog No.: 4588

Batch No.: 1

CAS Number: 29491-75-6

IUPAC Name: 2,2',2'',2'''-[4,8-Bis(hexahydro-1(2H)-azocinyl)pyrimido[5,4-d]pyrimidine-2,6-diyl]dinitrilo]tetrakisethanol

Description:

Potent equilibrative nucleoside transporter 1 (ENT1) inhibitor (IC₅₀ = 0.43 nM). Inhibits hENT1 and hENT2 uptake of [³H] uridine in K562 cells and K15NTD cells respectively.

Physical and Chemical Properties:

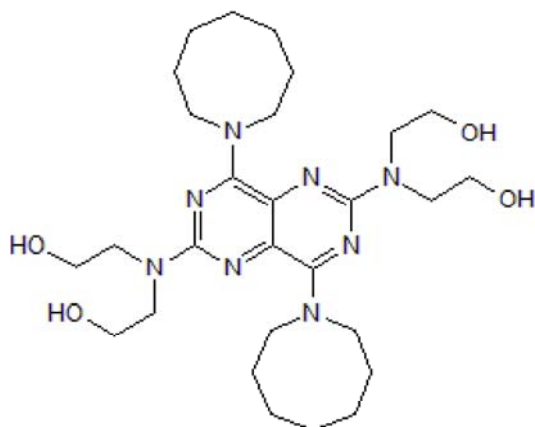
Batch Molecular Formula: C₂₈H₄₈N₈O₄·½H₂O

Batch Molecular Weight: 565.23

Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 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:

Lin *et al* (2011) Design, synthesis, and evaluation of 2-diethanolamino-4,8-diheptamethyleneimino-2-(N-aminoethyl-N-ethanolamino)-6-(N,N-diethanolamino)pyrimido[5,4-d]pyrimidine-fluorescein conjugate (8MDP-fluor), as a novel equilibrativ Bioconjug.Chem. **22** 1221. PMID: 21539390.

Lin *et al* (2007) Synthesis, flow cytometric evaluation, and identification of highly potent dipyrid. analogues as equilibrative nucleoside transporter 1 inhibitors. J.Med.Chem. **50** 3906. PMID: 17636949.

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