

Certificate of Analysis

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Product Name: 2,4-Diamino-6-hydroxypyrimidine

Catalog No.: 0476

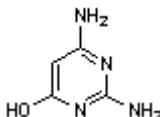
Batch No.: 1

CAS Number: 56-06-4

EC Number: 200-254-4

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₆N₄O.0.1H₂O
Batch Molecular Weight: 127.92
Physical Appearance: White solid
Solubility: Soluble in DMSO
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 284 - 288°C(Dec)

HPLC: Shows >99.9% purity

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	37.56	4.89	43.8
Found	37.3	4.91	43.48

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

Product Information

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Description:

GTP cyclohydrolase I (GCH1) inhibitor. Prevents the de novo synthesis of tetrahydrobiopterin (BH4) and thus suppresses the activity of NO synthase. Exhibits more potent inhibition of GCH1 in the presence of GFRP (GTP cyclohydrolase feedback-regulatory protein).

Physical and Chemical Properties:

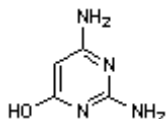
Batch Molecular Formula: C₄H₆N₄O.O.1H₂O

Batch Molecular Weight: 127.92

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

Soluble in DMSO

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:

Werner-Felmayer *et al* (1993) Pteridine biosynthesis in human endothelial cells. Impact of NO-mediated formation of cyclic GMP. *J.Biol.Chem.* **268** 1842. PMID: 7678411.

Moore and Handy (1997) Selective inhibitors of neuronal nitric oxide synthase - is no NOS really good NOS for the nervous system? *TiPs* **18** 204. PMID: 9226999.

Xie *et al* (1998) GTP cyclohydrolase I inhibition by the prototypic inhibitor 2,4-diamino-6-hydroxypyrimidine. *J.Biol.Chem.* **273** 21091. PMID: 9694862.

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