

Certificate of Analysis

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Product Name: PR 619

Catalog No.: 4482

Batch No.: 1

CAS Number: 2645-32-1

IUPAC Name: 2,6-Diamino-3,5-dithiocyanopyridine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_7H_5N_5S_2 \cdot \frac{1}{2}H_2O$

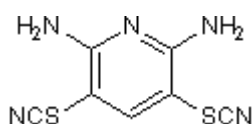
Batch Molecular Weight: 232.29

Physical Appearance: Light brown solid

Solubility: DMSO to 10 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: $R_f = 0.36$ (Dichloromethane:Methanol [9:1])

HPLC: Shows 100% purity

1H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	36.2	2.6	30.15
Found	35.96	2.22	30.49

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

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Description:

Broad spectrum, reversible DUB inhibitor. Exhibits limited activity against other proteases. Induces accumulation of polyubiquitinated proteins, but has no direct inhibitory effect on the proteasome. Cytotoxic in HEK293T and colorectal cancer cells. Stabilizes microtubule network in oligodendroglial cells.

Physical and Chemical Properties:

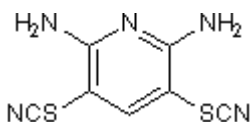
Batch Molecular Formula: C₇H₅N₅S₂ · ½H₂O

Batch Molecular Weight: 232.29

Physical Appearance: Light brown solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 10 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:

Altun *et al* (2011) Activity-based chemical proteomics accelerates inhibitor development for deubiquitylating enzymes. *Chem.Biol.* **18** 1401. PMID: 22118674.

Seiberlich *et al* (2012) The small molecule inhibitor PR-619 of deubiquitinating enzymes affects the microtubule network and causes protein aggregate formation in neural cells: implications for neurodegenerative diseases. *Biochim.Biophys.Acta* **1823** 2057. PMID: 22565157.

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