Print Date: Jan 27th 2020

Certificate of Analysis

www.tocris.com

Product Name: **Ryuvidine** **Catalog No.: 2609** **Batch No.: 2**

CAS Number: 265312-55-8

IUPAC Name: 2-Methyl-5-[(4-methylphenyl)amino]-4,7-benzothiazoledione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{12}N_2O_2S$

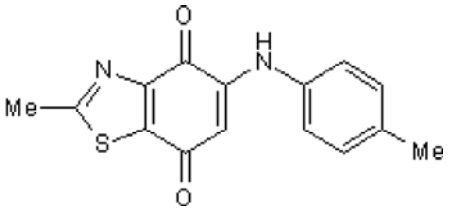
Batch Molecular Weight: 284.33

Physical Appearance: Dark purple solid

Solubility: DMSO to 20 mM
ethanol to 5 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Ethyl acetate:Petroleum ether [1:1])

HPLC: Shows 99.4% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	63.36	4.25	9.85
Found	63.24	4.25	9.81

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 Information

Product Name: **Ryuvidine** **Catalog No.: 2609** **Batch No.: 2**

CAS Number: 265312-55-8

IUPAC Name: 2-Methyl-5-[(4-methylphenyl)amino]-4,7-benzothiazoledione

Description:

Inhibitor of SETD8 protein lysine methyltransferase (PKMT) (IC_{50} = 0.5 μM); suppresses H4K20 monomethylation in vitro. Also inhibits cyclin-dependent kinase (CDK) 4 (IC_{50} = 6.0 μM at CDK4/cyclin D1). Induces S phase accumulation in HEK293T cells. Cytotoxic against a range of human cancer cells.

Physical and Chemical Properties:

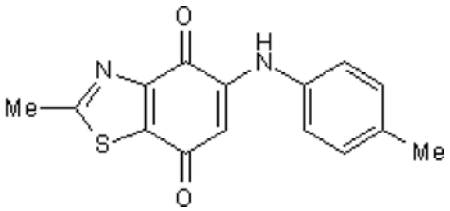
Batch Molecular Formula: $C_{15}H_{12}N_2O_2S$

Batch Molecular Weight: 284.33

Physical Appearance: Dark purple solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 20 mM
ethanol to 5 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:

Blum *et al* (2014) Small-molecule inhibitors of SETD8 with cellular activity. ASC.Chem.Biol. [Epub ahead of print] ***9*** 2471. PMID: 25137013.

Ryu *et al* (2000) 5-Arylamino-2-methyl-4,7-dioxobenzothiazoles as inhibitors of cyclin-dependent kinase 4 and cytotoxic agents. Bioorg.Med.Chem.Lett. ***10*** 461. PMID: 10743948.