

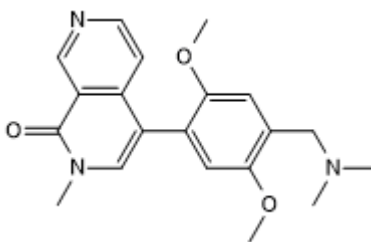
Certificate of Analysis

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Product Name: BI 9564 **Catalog No.:** 5590 **Batch No.:** 1
CAS Number: 1883429-22-8
IUPAC Name: 4-[4-[(Dimethylamino)methyl]-2,5-dimethoxyphenyl]-2-methyl-1,2-dihydro-2,7-naphthyridin-1-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{23}N_3O_3 \cdot \frac{1}{4}H_2O$
Batch Molecular Weight: 357.91
Physical Appearance: Brown solid
Solubility: DMSO to 20 mM
 1eq. HCl to 10 mM with gentle warming
 ethanol to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])
HPLC: Shows 98.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	67.11	6.62	11.74
Found	67.05	6.48	11.56

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

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Description:

Potent and selective BRD9 and BRD7 inhibitor (K_d values are 14 and 239 nM, respectively). Exhibits selectivity for BRD9/7 over 48 other bromodomains, 324 kinases and 55 GPCRs. Inhibits proliferation of AML cell lines in vitro and reduces AML tumor xenograft growth in vivo. Orally active.

Physical and Chemical Properties:

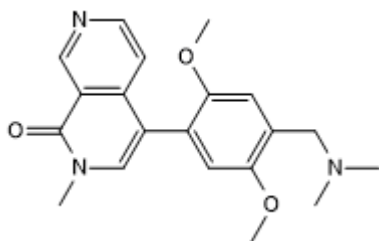
Batch Molecular Formula: $C_{20}H_{23}N_3O_3 \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 357.91

Physical Appearance: Brown solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 mM

1eq. HCl to 10 mM with gentle warming

ethanol 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:

Martin et al (2016) Structure-based design of an *in vivo* active selective BRD9 inhibitor J.Med.Chem. **59** 4462. PMID: 26914985.

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