

Certificate of Analysis

Print Date: Sep 13th 2022

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Product Name: BAY 299 Catalog No.: 5970 Batch No.: 3

CAS Number: 2080306-23-4

IUPAC Name: 6-(3-Hydroxypropyl)-2-(1,3,6-trimethyl-2-oxo-2,3-dihydro-1*H*-benzimidazol-5-yl)-1*H*-benzo[*de*]isoquinoline-1,3(2*H*)

-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{23}N_3O_4.\frac{1}{2}H_2O$

Batch Molecular Weight: 438.48

Physical Appearance:Pale yellow solidSolubility:DMSO to 100 mMStorage:Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.48 5.52 9.58 Found 68.17 5.28 9.59

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



Product Information

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Description:

BAY 299 is a potent and selective BRD1 and TAF1 inhibitor (IC_{50} values are 6-67 and 8-13 nM, respectively). Displays selectivity over other bromodomains (>30-fold over other members of the BRPF family; BRD9 and ATAD2; >300-fold over BRD4). Displays BRD1 and TAF1 inhibition in a NanoBRET cell assay. Inhibits binding of BRD1 and TAF1 to histone H4 (IC_{50} values are 575 nM and 0.9 μ M, respectively) and histone H3.3 (IC_{50} values are 825 nM and 1.4 μ M, respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₅H₂₃N₃O₄.½H₂O

Batch Molecular Weight: 438.48

Physical Appearance: Pale yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 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.

Licensing Information:

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the BAY 299 probe summary on the SGC website.

References:

Bouche *et al* (2017) Benzoisoquinolinediones as potent and selective inhibitors of BRPF2 and TAF1/TAF1L bromodomains. J.Med.Chem. *60* 4002. PMID: 28402630.

Klein et al (2014) Crosstalk between epigenetic readers regulates the MOZ/MORF HAT complexes. Epigenetics 9 186. PMID: 24169304.

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