

Certificate of Analysis

Print Date: Mar 23rd 2021

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Product Name: A 196 Catalog No.: 6167 Batch No.: 1

CAS Number: 1982372-88-2

IUPAC Name: 6,7-Dichloro-*N*-cyclopentyl-4-(4-pyridinyl)-1-phthalazinamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{16}Cl_2N_4$ Batch Molecular Weight: 359.25

Physical Appearance:Off White solidSolubility:DMSO to 20 mMStorage:Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.53 (5\% \text{ MeOH in DCM})$

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.18 4.49 15.6 Found 59.89 4.5 15.54

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



Product Information

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Description:

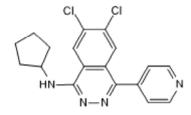
A 196 is a potent and selective SUV420H1/H2 inhibitor (IC $_{50}$ values are 25 and 144 nM respectively) that exhibits 100-fold selectivity over other histone methyltransferases and non-epigenetic targets. A 196 inhibits the di- and tri-methylation of H4K20me in multiple cell lines (IC $_{50}$ < 1 μ M). To request the negative control for A 196, please fill out the SGC 2043 request form on the SGC website.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{18}H_{16}Cl_2N_4$ Batch Molecular Weight: 359.25 Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO 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.

Licensing Information:

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the A-196 probe summary on the SGC website.

References:

Scheer *et al* (2019) A chemical biology toolbox to study protein methyltransferases and epigenetic signaling. Nat.Commun. *10* 19. PMID: 30604761.

Bromberg et al (2017) The SUV4-20 inhibitor A-196 verifies a role for epigenetics in genomic integrity. Nat.Chem.Biol. **13** 317. PMID: 28114273.

Brustel *et al* (2017) Histone H4K20 tri-methylation at late-firing origins ensures timely heterochromatin replication. EMBO J **36** 2726. PMID: 28778956.