

Certificate of Analysis

Product Name: Adaptaquin

Catalog No.: 5953

Batch No.: 1

CAS Number: 385786-48-1

IUPAC Name: 7-[(4-Chlorophenyl)[(3-hydroxy-2-pyridinyl)amino]methyl]-8-quinolinol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{16}ClN_3O_2 \cdot \frac{1}{4}H_2O$

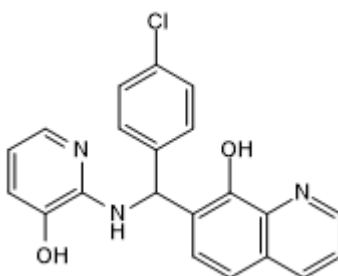
Batch Molecular Weight: 382.32

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 65.97 4.35 10.99

Found 65.81 4.3 11.05

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

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Description:

HIF-prolyl hydroxylase-2 (PHD2) inhibitor. Blocks glutamate induced ROS production in HT-22 cells, independent of MnSOD. Exhibits neuroprotective effects and enhances functional recovery in rodent intracerebral hemorrhage models, via inhibition of ATF4 dependent genes. Brain penetrant. Also antioxidant.

Physical and Chemical Properties:

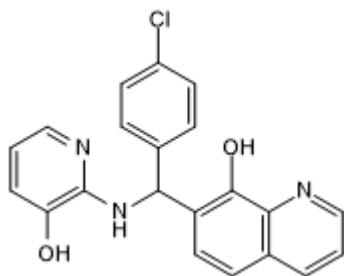
Batch Molecular Formula: C₂₁H₁₆ClN₃O₂·¼H₂O

Batch Molecular Weight: 382.32

Physical Appearance: Off White solid

Minimum Purity: >97%

Batch Molecular Structure:



References:

Karuppagounder et al (2016) Therapeutic targeting of oxygen-sensing prolyl hydroxylases abrogates ATF4-dependent neuronal death and improves outcomes after brain hemorrhage in several rodent models. *Sci.Transl.Med.* **8** 328ra29. PMID: 26936506.

Neitemeier et al (2016) Inhibition of HIF-prolyl-4-hydroxylases prevents mitochondrial impairment and cell death in a model of neuronal oxytosis. *Cell Death Dis.* **7** e2214. PMID: 27148687.

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.

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