

Certificate of Analysis

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Product Name: KH CB19

Catalog No.: 4262

Batch No.: 2

CAS Number: 1354037-26-5

IUPAC Name: Ethyl 3-(2-Amino-1-cyanoethenyl)-6,7-dichloro-1-methylindole-2-carboxylate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₃Cl₂N₃O₂

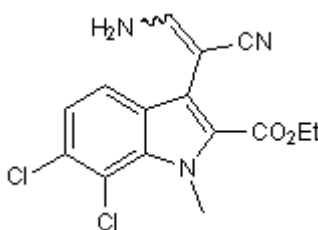
Batch Molecular Weight: 338.19

Physical Appearance: Off-white solid

Solubility: DMSO to 40 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

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

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Description:

Selective, potent inhibitor of CDC2-like kinase (CLK) 1 and 4 (IC₅₀ = 20 nM for CLK1). Suppresses serine/arginine-rich protein phosphorylation by CLKs under proinflammatory conditions. Displays selectivity over a panel of 71 protein kinases. ATP-competitive.

Physical and Chemical Properties:

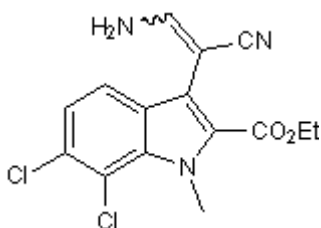
Batch Molecular Formula: C₁₅H₁₃Cl₂N₃O₂

Batch Molecular Weight: 338.19

Physical Appearance: Off-white solid

Minimum Purity: >97%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 40 mM

This product is predominantly the *E* isomer with <10% *Z* isomer present. The quoted purity is for the sum of both isomers. The pure *E* isomer of KH CB19 and *E/Z* mixture of KH CB19 are reported to have similar kinase binding activity.

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:

Fedorov *et al* (2011) Specific CLK inhibitors from a novel chemotype for regulation of alternative splicing. *Chem.Biol.* **18** 67. PMID: 21276940.

Boltzen *et al* (2012) Alternatively spliced tissue factor and full-length tissue factor protect cardiomyocytes against TNF- α -induced apoptosis. *J.Mol.Cell.Cardiol.* **52** 1056. PMID: 22326437.

Eisenreich *et al* (2013) Regulation of pro-angiogenic tissue factor expression in hypoxia-induced human lung cancer cells. *Oncol.Rep.* **30** 462. PMID: 23604472.

Knapp *et al* (2013) A public-private partnership to unlock the untargeted kinome. *Nat.Chem.Biol.* **9** 3. PMID: 23238671.

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