



# **Certificate of Analysis**

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Product Name: PD 407824 Catalog No.: 2694 Batch No.: 1

CAS Number: 622864-54-4

IUPAC Name: 9-Hydroxy-4-phenyl-pyrrolo[3,4-c]carbazole-1,3(2H,6H)-dione

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{20}H_{12}N_2O_3$ . <sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 332.82

Physical Appearance: Orange solid

**Solubility:** DMSO to 100 mM

ethanol to 25 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

HO NH Ph

# 2. ANALYTICAL DATA

**HPLC:** Shows 98.0% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 72.17 3.79 8.42

Found 72.53 3.82 8.14



# **Product Information**

Print Date: Oct 9th 2014

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#### **Description:**

Selective inhibitor of checkpoint kinases Chk1 and Wee1 ( $IC_{50}$  values are 47 and 97 nM respectively). Displays selectivity over a range of other protein kinases;  $IC_{50}$  values are 3.4, 3.75, > 5, > 50, > 50 and > 50  $\mu$ M for PKC, CDK4, other CDKs, c-Src, PDGFR and FGFR respectively.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>20</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>.¼H<sub>2</sub>O

Batch Molecular Weight: 332.82 Physical Appearance: Orange solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at +4°C

# Solubility & Usage Info:

DMSO to 100 mM ethanol to 25 mM

When purched as a 1mg unit, this product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

## 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:

**Squire** et al (2005) Structure and inhibition of the human cell cycle checkpoint kinase, Wee1A kinase: an atypical tyrosine kinase with a key role in CDK1 regulation. Structure **13** 541. PMID: 15837193.

**Palmer** *et al* (2006) 4-Phenylpyrrolo[3,4-*c*]carbazole-1,3(2*H*,6*H*)-dione inhibitors of the checkpoint kinase Wee1. Structure-activity relationships for chromophore modification and phenylring substitutions. J.Med.Chem. *49* 4896. PMID: 16884302.

