



Certificate of Analysis

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Product Name: ZM 447439 Catalog No.: 2458 Batch No.: 4

CAS Number: 331771-20-1

IUPAC Name: N-[4-[[6-Methoxy-7-[3-(4-morpholinyl)propoxy]-4-quinazolinyl]amino]phenyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{29}H_{31}N_5O_4.1\frac{1}{2}H_2O$ **Batch Molecular Formula:**

Batch Molecular Weight: 540.61

Physical Appearance: Orange solid

DMSO to 100 mM Solubility: Store at -20°C

Batch Molecular Structure:

Storage:

2. ANALYTICAL DATA

TLC: $R_f = 0.35$ (Dichloromethane:Methanol [9:1])

HPLC: Shows 98.6% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 64.43 12.95 6.34 Found 64.53 6.14 13.04

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



Product Information

Print Date: Jun 28th 2019

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Description:

Novel, selective ATP-competitive inhibitor of Aurora B kinase in vitro (IC $_{50}$ values are 50, 250 and 1000 nM for Aurora B, C and A kinases respectively). Selective over a range of other kinases including cdk1 and PLK1 (IC $_{50}$ > 10 μ M). Inhibits cell division and displays selective toxicity towards proliferating tumor cells versus non-dividing cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₉H₃₁N₅O₄.1½H₂O

Batch Molecular Weight: 540.61 Physical Appearance: Orange 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:

Sold with the permission of AstraZeneca UK Ltd.

References:

Girdler et al (2006) Validating Aurora B as an anti-cancer drug target. J.Cell Sci. 119 3664. PMID: 16912073.

Jung *et al* (2006) Discovery of novel and potent thiazoloquinazolines as selective Aurora A and B kinase inhibitors. J.Med.Chem. *49* 955. PMID: 16451062.

Ditchfield *et al* (2003) Aurora B couples chromosome alignment with anaphase by targeting BubR1, Mad2, and Cenp-E to kinetochores. J.Cell Biol. *161* 267. PMID: 12719470.

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