

Certificate of Analysis

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Product Name: TC Mps1 12

Catalog No.: 4750

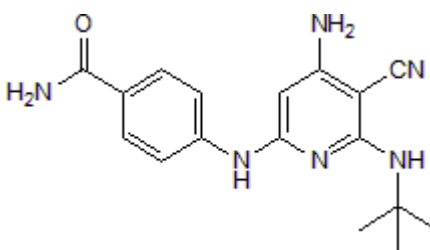
Batch No.: 1

CAS Number: 1206170-62-8

IUPAC Name: 4-[[4-Amino-5-cyano-6-[(1,1-dimethylethyl)amino]-2-pyridinyl]amino]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₂₀N₆O·¼H₂O
Batch Molecular Weight: 328.88
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 20 mM with gentle warming
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.43 (Ethyl acetate)
HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	62.08	6.28	25.55
Found	62.4	6.24	25.27

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

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Description:

Potent and selective monopolar spindle 1 (Mps1) inhibitor (IC₅₀ = 6.4 nM). Selective for Mps1 over a panel of 95 kinases including JNK. Inhibits A549 lung carcinoma cell proliferation and attenuates A549 cell xenograft growth in mice. Orally active.

Physical and Chemical Properties:

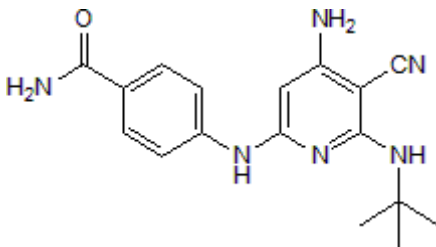
Batch Molecular Formula: C₁₇H₂₀N₆O.¼H₂O

Batch Molecular Weight: 328.88

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Kusakabe et al (2012) Diaminopyridine-based potent and selective mps1 kinase inhibitors binding to an unusual flipped-Peptide conformation. ACS Med.Chem.Lett. **3** 560. PMID: 24900510.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 mM with gentle warming

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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