

Product Name: AIM 100

Catalog No.: 4946

Batch No.: 2

CAS Number: 873305-35-2

IUPAC Name: 5,6-Diphenyl-N-[[[(2S)-tetrahydro-2-furanyl]methyl]furo[2,3-*d*]pyrimidin-4-amine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₁N₃O₂·¼H₂O

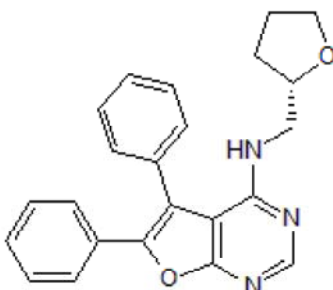
Batch Molecular Weight: 375.93

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM
ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.1 (Ethyl acetate:Petroleum ether [8:2])

HPLC: Shows 98% purity

Chiral HPLC: Shows 99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	73.48	5.76	11.18
Found	73.49	5.6	11.3

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956

Product Name: AIM 100

Catalog No.: 4946

Batch No.: 2

CAS Number: 873305-35-2

IUPAC Name: 5,6-Diphenyl-N-[[[(2S)-tetrahydro-2-furanyl]methyl]furo[2,3-*d*]pyrimidin-4-amine

Description:

Potent Ack1 (TNK2) inhibitor (IC₅₀ = 22 nM). Exhibits selectivity for Ack1 over ABL1, BTK, Lck and LYN; exhibits no inhibition of 25 other kinases. Suppresses phosphorylation of Tyr267 of the androgen receptor in prostate cancer cells. Also suppresses growth of radioresistant castration-resistant prostate cancer in xenograft tumors in mice. Also promotes DAT endocytosis and oligomerization.

Physical and Chemical Properties:

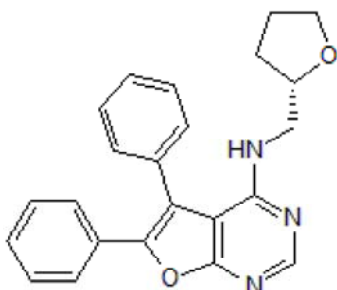
Batch Molecular Formula: C₂₃H₂₁N₃O₂·¼H₂O

Batch Molecular Weight: 375.93

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM
ethanol 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.

References:

Sorkina *et al* (2018) Small molecule induced oligomerization, clustering and clathrin-independent endocytosis of the dopamine transporter. *Elife*. **7**. PMID: 29630493 .

Mahajan *et al* (2012) Ack1-mediated androgen receptor phosphorylation modulates radiation resistance in castration-resistant prostate cancer. *J.Biol.Chem.* **287** 22112. PMID: 22566699.

Mahajan *et al* (2010) Effect of Ack1 tyrosine kinase inhibitor on ligand-independent androgen receptor activity. *Prostate* **70** 1274. PMID: 20623637.

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

bio-techne.com

info@bio-techne.com
techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors
Tel:+1 612 379 2956