

Product Name: AIM 100

Catalog No.: 4946

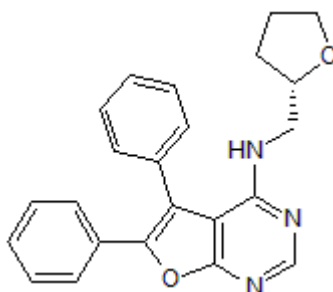
Batch No.: 1

CAS Number: 873305-35-2

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₁N₃O₂
Batch Molecular Weight: 371.43
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 [4:1])
HPLC: Shows >99.4% purity
Chiral HPLC: Shows >98.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +75.7 (Concentration = 1, Solvent = Chloroform)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	74.37	5.7	11.31
Found	74	5.68	11.23

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

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Description:

Potent Ack1 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.

Physical and Chemical Properties:

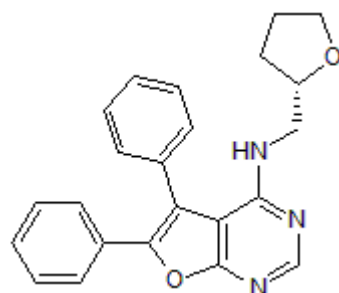
Batch Molecular Formula: C₂₃H₂₁N₃O₂

Batch Molecular Weight: 371.43

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:

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

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