

Product Name: Dinaciclib

Catalog No.: 7336

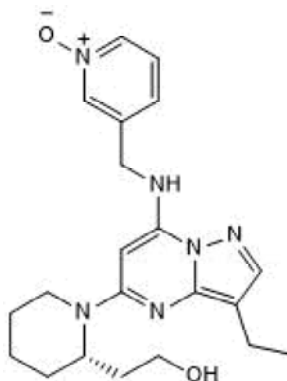
Batch No.: 1

CAS Number: 779353-01-4

IUPAC Name: (2S)-1-[3-Ethyl-7-[[[(1-oxido-3-pyridinyl)methyl]amino]pyrazolo[1,5-a]pyrimidin-5-yl]-2-piperidineethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₈N₆O₂.
Batch Molecular Weight: 396.5
Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
ethanol to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -109.9 (Concentration = 1, Solvent = Methanol)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	63.62	7.12	21.2
Found	63.39	7.13	20.96

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

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Description:

Dinaciclib is a potent and selective inhibitor of CDK2, CDK5, CDK1 and CDK9 activity in vitro (IC₅₀ values are 1, 1, 3 and 4 nM, respectively). Dinaciclib is a DNA replication inhibitor that blocks thymidine DNA incorporation in A2780 cells with an IC₅₀ of 4 nM. Dinaciclib induced regression of established solid tumors in mouse models and shows strong antiviral activity across two cell lines (Vero E6, IC₅₀ = 0.127 μM; A549-ACE2, IC₅₀ = 0.032 μM).

Physical and Chemical Properties:

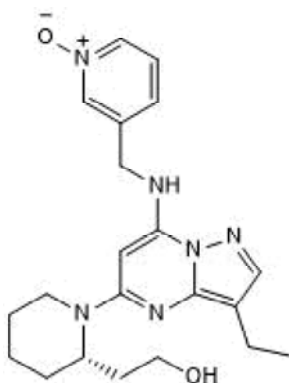
Batch Molecular Formula: C₂₁H₂₈N₆O₂.

Batch Molecular Weight: 396.5

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Bouhaddou et al (2020) The global phosphorylation landscape of SARS-CoV-2 infection. *Cell* **182** 685. PMID: 32645325.

Parry et al (2010) Dinaciclib (SCH 727965), a novel and potent cyclin-dependent kinase inhibitor. *Mol.CancerTher.* **9** 2344. PMID: 20663931.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 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.

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