

Product Name: MU 1742

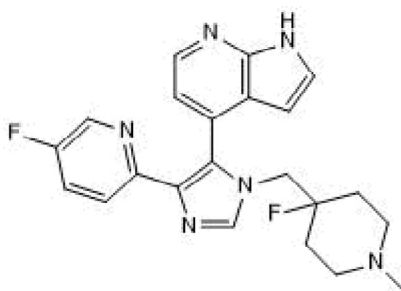
Catalog No.: 7979

Batch No.: 1

IUPAC Name: 4-(1-((4-Fluoro-1-methylpiperidin-4-yl)methyl)-4-(5-fluoropyridin-2-yl)-1H-imidazol-5-yl)-1H-pyrrolo[2,3-b]pyridine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₂ H ₂₂ F ₂ N ₆
Batch Molecular Weight:	408.46
Physical Appearance:	Off White solid
Solubility:	DMSO to 100 mM ethanol to 100 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 98.2% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

Microanalysis:	Carbon Hydrogen Nitrogen		
Theoretical	64.69	5.43	20.58
Found	63.69	5.51	20.1

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

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Description:

MU 1742 is a potent and selective casein kinase 1α (CK1α), CK1δ and CK1ε inhibitor (IC₅₀ values are 6; 7 and 28 nM for CK1δ; CK1α and CK1ε respectively). In vivo, MU 1742 inhibits CK1δ/ε-dependent DVL3 phosphorylation in lung mice tissue. MU 1742 is orally bioavailable.

Physical and Chemical Properties:

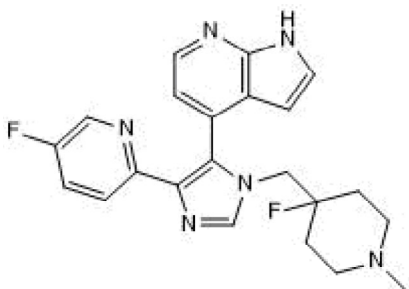
Batch Molecular Formula: C₂₂H₂₂F₂N₆

Batch Molecular Weight: 408.46

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Němec *et al* (2023) Discovery of potent and exquisitely selective inhibitors of kinase CK1 with tunable isoform selectivity. *Angew.Chem.Int.Ed.Engl.* **62** e202217532. PMID: 36625768.

Storage: Store at -20°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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

This compound is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the MU 1742 probe summary on the SGC website.

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