bio-techne
TOCRIS

Print Date: Nov 18th 2025

Certificate of Analysis

www.tocris.com

Product Name: **MU 1742** **Catalog No.: 7979** **Batch No.: 1**

CAS Number: 3095089-18-9

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{22}F_2N_6$

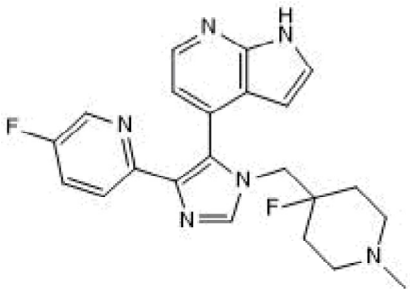
Batch Molecular Weight: 408.46

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

^{1}H 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

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: **MU 1742** **Catalog No.: 7979** **Batch No.: 1**

CAS Number: 3095089-18-9

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

Description:

MU 1742 is a potent and selective casein kinase 1α (CK1α), CK1δ and CK1ε inhibitor (IC_{50} values are 6, 7 and 28 nM for CK1δ, CK1α and CK1ε respectively). In vivo, MU 1742 inhibits CK1δ/ε-dependent DVL3 phosphorylation in mouse lung tissue. MU 1742 is orally bioavailable.

Physical and Chemical Properties:

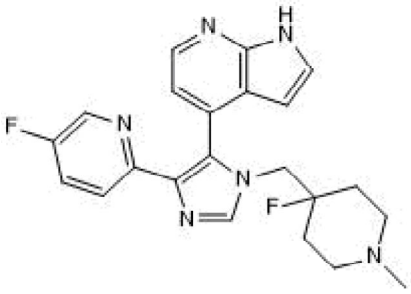
Batch Molecular Formula: $C_{22}H_{22}F_2N_6$

Batch Molecular Weight: 408.46

Physical Appearance: Off White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



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.

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.