



Certificate of Analysis

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Product Name: MS 143 Catalog No.: 8081 Batch No.: 1

CAS Number: 2376137-41-4

IUPAC Name: 4-Amino-N-((S)-1-(4-chlorophenyl)-3-(4-(12-(((S)-1-((2S,4R)-4-hydroxy-2-((4-(4-methylthiazol-5-yl)benzyl)

carbamoyl)pyrrolidin-1-yl)-3,3-dimethyl-1-oxobutan-2-yl)amino)-12-oxododecanoyl)piperazin-1-yl)propyl)-1-(7H-

pyrrolo[2,3-d]pyrimidin-4-yl)piperidine-4-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{59}H_{81}CIN_{12}O_6S$.

Batch Molecular Weight: 1121.89 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM
Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.17 7.28 14.98 Found 62.88 7.31 14.55

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

Product Information

Print Date: Jan 13th 2025

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pyrrolo[2,3-d]pyrimidin-4-yl)piperidine-4-carboxamide

Description:

MS 143 is a potent and selective protein kinase B (AKT) Degrader (PROTAC®) (DC50 = 46 nM, D_{max} = 100 % at 24h in PC3 cells). MS 143 suppresses growth in prostate cancer PC3 cells; suppresses tumor growth and reduces AKT protein levels in a mouse PC3 cell xenograft model. PROTAC® is a registered trademark of Arvinas Operations, Inc., and is used under license.

Physical and Chemical Properties:

Batch Molecular Formula: C₅₉H₈₁ClN₁₂O₆S.

Batch Molecular Weight: 1121.89 Physical Appearance: White solid

Minimum Purity: ≥97%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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:

Sold under license from Icahn School of Medicine at Mount Sinai.

References:

Yu et al (2022) Discovery of potent, selective, and in vivo efficacious AKT kinase protein degraders via structure-activity relationship studies. J.Med.Chem. 65 3644. PMID: 35119851.

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