

Certificate of Analysis

Product Name: AZD 3147

Catalog No.: 5615

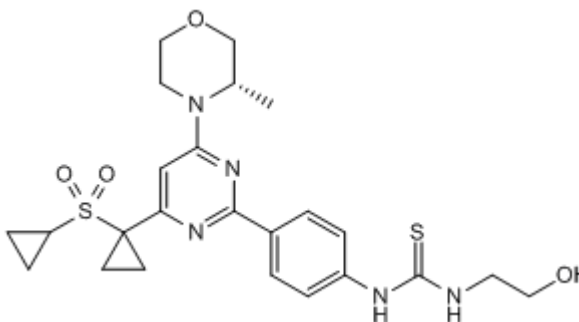
Batch No.: 1

CAS Number: 1101810-02-9

IUPAC Name: *N*-[4-[4-[1-(Cyclopropylsulfonyl)cyclopropyl]-6-[(3*S*)-3-methyl-4-morpholinyl]-2-pyrimidinyl]phenyl]-*N*-(2-hydroxyethyl)thiourea

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₃₁N₅O₄S₂
Batch Molecular Weight: 517.66
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 1eq. HCl to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.29 (Dichloromethane:Methanol [9:1])
HPLC: Shows 98.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	55.68	6.04	13.53
Found	55.45	6.16	13.45

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

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Description:

Potent and selective dual mTORC1 and 2 inhibitor (IC₅₀ = 1.5 nM). Exhibits >300-fold selectivity for mTOR over PI 3-kinase isoforms. Orally bioavailable.

Physical and Chemical Properties:

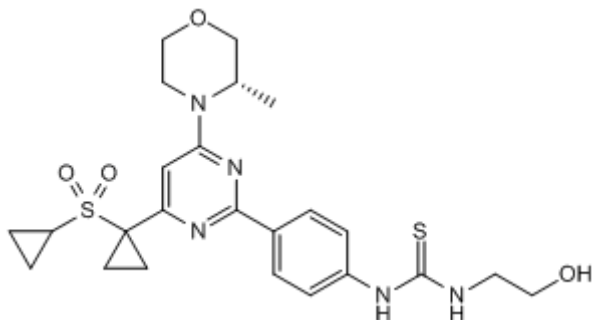
Batch Molecular Formula: C₂₄H₃₁N₅O₄S₂

Batch Molecular Weight: 517.66

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM
1eq. HCl 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:

Pike et al (2015) Discovery of AZD3147: a potent, selective dual inhibitor of mTORC1 and mTORC2. *J.Med.Chem.* **58** 2326. PMID: 25643210.

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