

Certificate of Analysis

Print Date: May 10th 2022

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Product Name: SNS 032 Catalog No.: 4075 Batch No.: 1

CAS Number: 345627-80-7

IUPAC Name: N-[5-[[[5-(1,1-Dimethylethyl])-2-oxazolyl]methyl]thio]-2-thiazolyl]-4-piperidinecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{24}N_4O_2S_2.\frac{1}{2}H_2O$

Batch Molecular Weight: 389.54 **Physical Appearance:** White solid

Solubility: DMSO to 50 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.1$ (Chloroform:Methanol [9:1])

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.42 6.47 14.38 Found 52.12 6.42 14.34



Product Information

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IUPAC Name: N-[5-[[[5-(1,1-Dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl]-4-piperidinecarboxamide

Description:

SNS 032 is a cyclin dependent kinase (cdk) inhibitor (reported IC $_{50}$ values are 0.004 - 0.048, 0.0045 - 0.05, 0.062 - 0.29, 0.2-0.48, 0.4 and 0.45 μM for cdk9, cdk2, cdk7, cdk1, cdk5 and cdk4, respectively). Displays no activity against 190 additional kinases (IC $_{50}$ >1 μM). Arrests the cell cycle at G $_2/M$; inhibits transcription, proliferation and colony formation, and induces apoptosis in RPMI-8226 multiple myeloma cells. Prevents tumor cell-induced VEGF secretion and in vitro angiogenesis.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₂₄N₄O₂S₂.½H₂O

Batch Molecular Weight: 389.54 Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 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:

Jorda et al (2018) How selective are pharmacological inhibitors of cell-cycle-regulating cyclin-dependent kinases? J.Med.Chem. 61 9105. PMID: 30234987.

Chen et al (2010) Responses in mantle cell lymphoma cells to SNS-032 depend on the biological context of each cell line. Cancer Res. 70 6587. PMID: 20663900.

Conroy et al (2009) SNS-032 is a potent and selective CDK 2, 7 and 9 inhibitor that drives target modulation in patient samples. Cancer Chemother.Pharmacol. **64** 723. PMID: 19169685.

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