

PRODUCT INFORMATION

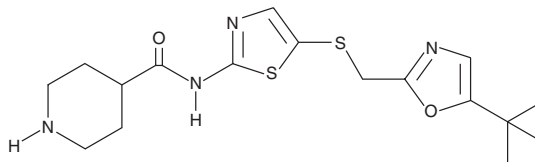


SNS-032

Item No. 17904

CAS Registry No.: 345627-80-7
Formal Name: N-[5-[[[5-(1,1-dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl]-4-piperidinecarboxamide

Synonym: BMS-387032
MF: C₁₇H₂₄N₄O₂S₂
FW: 380.5
Purity: ≥98%
UV/Vis.: λ_{max}: 285 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SNS-032 is supplied as a crystalline solid. A stock solution may be made by dissolving the SNS-032 in the solvent of choice, which should be purged with an inert gas. SNS-032 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SNS-032 in these solvents is approximately 2.5, 2, and 10 mg/ml, respectively.

SNS-032 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SNS-032 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SNS-032 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cyclin-dependent kinases (CDKs) are key regulators of cell cycle progression and are therefore promising targets for cancer therapy. SNS-032 is an ATP-competitive inhibitor of Cdk9, 2, and 7 with IC₅₀ values of 4, 38, and 62 nM, respectively.¹ It is selective for these kinases and displays no additional activity against a panel of 190 kinases (IC₅₀s = >1,000 nM).¹ SNS-032 can block the cell cycle, inhibit transcription, and induce apoptosis in multiple myeloma RPMI-8226 cells with an IC₉₀ value of 0.3 μM.² This compound has been shown to induce apoptosis by inhibiting the transcription of the anti-apoptotic proteins, Mcl-1 and XIAP.³

References

- Misra, R.N., Xiao, H.-Y., Kim, K.S., *et al.* N-(cycloalkylamino)acyl-2-aminothiazole inhibitors of cyclin-dependent kinase 2. N-[5-[[[5-(1,1-dimethylethyl)-2-oxazolyl]methyl]thio]-2-thiazolyl]-4-piperidinecarboxamide (BMS-387032), a highly efficacious and selective antitumor agent. *J. Med. Chem.* **47**(7), 1719-1728 (2004).
- Conroy, A., Stockett, D.E., Walker, D., *et al.* SNS-032 is a potent and selective CDK 2, 7 and 9 inhibitor that drives target modulation in patient samples. *Cancer Chemother. Pharmacol.* **64**, 723-732 (2009).
- Chen, R., Wierda, W.G., Chubb, S., *et al.* Mechanism of action of SNS-032, a novel cyclindependent kinase inhibitor, in chronic lymphocytic leukemia. *Blood* **113**(19), 4637-4645 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM