

PRODUCT INFORMATION



AZ 3146

Item No. 19991

CAS Registry No.: 1124329-14-1
Formal Name: 9-cyclopentyl-7,9-dihydro-2-[[2-methoxy-4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]-7-methyl-8H-purin-8-one

Synonym: Mps1 Inhibitor III

MF: C₂₄H₃₂N₆O₃

FW: 452.6

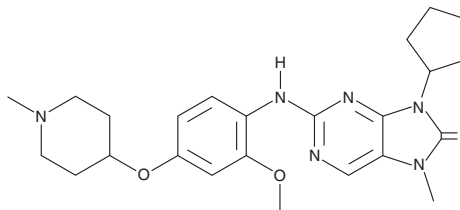
Purity: ≥98%

UV/Vis.: λ_{max}: 276, 302 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

AZ 3146 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZ 3146 in the solvent of choice, which should be purged with an inert gas. AZ 3146 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AZ 3146 in these solvents is approximately 2, 0.3, and 5 mg/ml, respectively.

AZ 3146 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AZ 3146 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AZ 3146 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

AZ 3146 is an inhibitor of the monopolar spindle 1 (Mps1) checkpoint kinase (IC₅₀ = 35 nM).¹ It displays selectivity over 46 other kinases including Cdk1 and Aurora kinase B.¹ It has been shown to inhibit the recruitment of Mad1, Mad2, and centromere protein E (CENP-E) to kinetochores.¹ AZ 3146 can be used with GSK923295 (Item No. 18389), an inhibitor of CENP-E, to generate aneuploidy in cells.²

References

1. Lan, W. and Cleveland, D.W. A chemical tool box defines mitotic and interphase roles for Mps1 kinase. *J. Cell. Biol.* **190**(1), 21-24 (2010).
2. Bennett, A., Bechi, B., Tighe, A., et al. Cenp-E inhibitor GSK923295: Novel synthetic route and use as a tool to generate aneuploidy. *Oncotarget* **6**(25), 20921-20932 (2015).

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.

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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