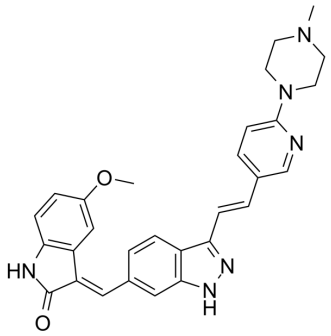
CFI-400437

Cat. No.:	HY-120279A
CAS No.:	1169211-37-3
Molecular Formula:	$C_{29}H_{28}N_6O_2$
Molecular Weight:	492.57
Target:	Polo-like Kinase (PLK)
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CFI-400437 is an indolinone-derived, ATP-competitive kinase inhibitor with high selectivity for PLK4 (IC_{50} of 0.6 nM)[1].
In Vitro	CFI-400437 is a potent inhibitor of MCF-7, MDA-MB-468 and MDA-MB231 cell growth[1]. CFI-400437 inhibits Aurora A, Aurora B, KDR and FLT-3 with IC_{50}s of 0.37, 0.21, 0.48, and 0.18 μM, respectively, i.e. two orders of magnitude higher than its IC_{50} of 0.6 nM against PLK4[1]. CFI-400437 inhibits both AURKB and AURKC at concentrations <15 nM[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	CFI-400437 (25 mg/kg, ip, once daily for 21 d) exhibits antitumor activity against MDA-MB-468 breast cancer mouse xenograft model[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Radoslaw Laufer, et al. The discovery of PLK4 inhibitors: (E)-3-((1H-Indazol-6-yl)methylene)indolin-2-ones as novel antiproliferative agents. J Med Chem. 2013 Aug 8;56(15):6069-87.

[2]. Amreena Suri, et al. Evaluation of Protein Kinase Inhibitors with PLK4 Cross-Over Potential in a Pre-Clinical Model of Cancer. Int J Mol Sci. 2019 Apr 29;20(9):2112.

Caution: Product has not been fully validated for medical applications. For research use only.

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